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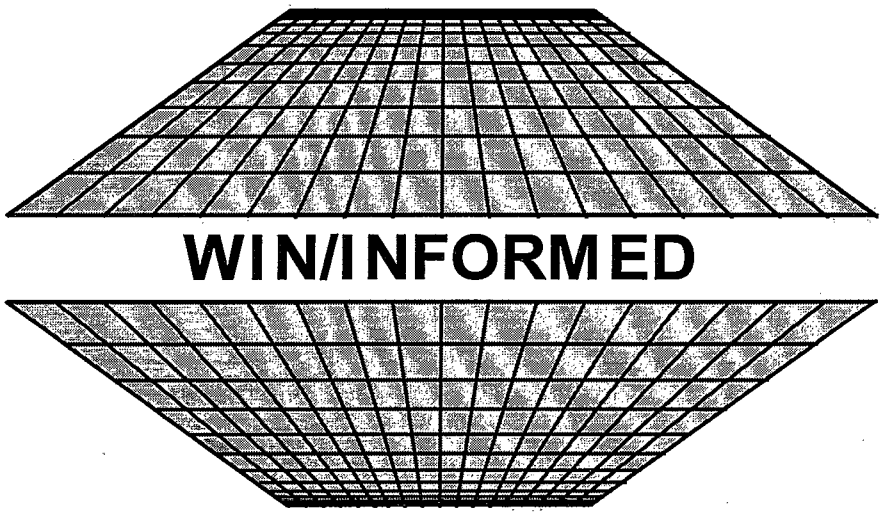
Program Evaluation Program Area Analysis

Final Report



EXECUTIVE SUMMARY

Waste Information Needs/Information Needs for Making Environmental Decisions (WIN/INFORMED) is a joint information reinvention project conducted by states and the U.S. Environmental Protection Agency (EPA). The project will determine how hazardous waste program implementation is changing and how these changes affect future information needs. To date, the WIN/INFORMED project has divided the hazardous waste management program into five program areas (PA) for in-depth analyses: Program Evaluation (PE), Universe Identification (UID), Waste Activity Monitoring (WAM), Handler Monitoring and Assistance (HMA), and Permitting and Corrective Action (PCA).

This report addresses the results of the PE Program Area Analysis (PAA) and covers information needs and process improvements associated with planning, grants, and evaluation activities within the hazardous waste management program. Two states, three EPA regions, and various EPA headquarters staff from the Office of Solid Waste (OSW) and the Office of Enforcement and Compliance Assurance (OECA) actively participated in the PE PAA Team (Team). The Team conducted numerous interviews with states, EPA regions, and EPA headquarters to gather information.

All participating organizations in the PE PAA interviews were consistent in describing how commonly shared external and internal pressures are influencing their program activities, priorities, and information needs. Program information needs are being influenced by changing circumstances, such as cross-media environmental management, the need to demonstrate environmental benefits of regulatory program activities in a more meaningful manner, the need to account to external audiences about program conduct, the interest in increased regulatory flexibility, and the evolving state-EPA relationship. Because of these and other influences and objectives, hazardous waste management programs have new or additional measures (i.e., outputs, outcomes, and indicators) to track the progress of the program, as well as new integration needs.

Proceeding with information collected during the interviews, the Team identified seven key findings and developed recommendations to address each of the findings. This Executive Summary briefly lists the Team's key findings and recommendations for future action. The reader will find supporting details in Chapter 3 of the report.

KEY FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are grouped into three categories: data needs, information systems needs, and business process needs. The Design Team will decide whether to modify an existing system or construct a new system to meet the information systems needs.

DATA NEEDS

1. States and EPA should agree upon a base set of national data elements that will be used in national and regional plans, grants, and evaluations, including reports on the accomplishments of the hazardous waste management program.

RECOMMENDATION

The Team recommends a base set of data elements that EPA and states will use for planning, evaluating, and reporting the accomplishments of the hazardous waste management program. Figure 4 identifies these data elements (see page 14), and Appendix A provides a detailed listing with data element definitions. State, EPA regional, and EPA headquarters stakeholders must agree that:

(1) this list of data elements is the minimum set needed for national program planning, grants, and evaluation purposes,
(2) the data element definitions are accurate, and
(3) the history and owner requirements for each data element are correct.

State and EPA acceptance of the data elements listed in Appendix A denotes agreement that these data elements are a starting point, representing the minimum information needed to plan, evaluate, and report the accomplishments of the hazardous waste program. These data will be included in a national information system, although they may be revised by subsequent PAA Teams. The Team is not recommending any new data elements to support plans, grants, and evaluations, although certain Government Performance Results Act (GPRA) measures and baselines are under development.

INFORMATION SYSTEM NEEDS

2. States and EPA cannot easily track the progress of the hazardous waste management program or readily relate this progress to evaluation and planning efforts. To accomplish these objectives, states and EPA specified the need for an automated system to track program accomplishments.

RECOMMENDATION

The Team recommends use of an automated system designed to track the progress of the hazardous waste management program. It is the Design Team's responsibility to investigate and design automated systems recommended by the PAA Teams and accepted by the Executive

Steering Committee (ESC). Such systems will be designed with a holistic view of the overall WIN/INFORMED Initiative and in accordance with current technical architecture guidelines. It is not the role of the PE PAA Team to recommend any separate or additional system(s), however, the Team does recommend that an automated system have capabilities to accomplish the following tasks:

- Track actual accomplishments against goals or milestones
- Accommodate all types of measures of success, including quantitative, qualitative, narrative, and environmental indicators
- Provide flexibility to enable states, EPA regions, and headquarters program offices to adopt it to meet their own internal reporting needs
- Provide time-specific reports (e.g., quarterly, fiscal year)
- Aggregate and disaggregate data
- Provide easy data retrieval and report writing
- Provide a variety of high-level reports, charts, and graphics
- Link activities to specific RCRA handlers
- Provide links to other relevant databases to "read" data elements where necessary

3. **The current process of hazardous waste grant application, negotiation, and management is overly burdensome. State, EPA regional, and national hazardous waste managers want a more rapid, automated grant negotiation and approval process. In addition, states and EPA regions want the ability to search and retrieve information related to their own and other grant projects.**

RECOMMENDATION

The Team recommends that hazardous waste managers and staff have access to an automated system that addresses user needs related to the grants process. Among other functions, such a system would provide (1) on-line negotiation of grant applications and workplans, (2) electronic submittal, distribution, and approval of grant applications and workplan activities, and (3) on-line access to the apportionment of grant funds by EPA headquarters to EPA regions and by EPA regions to individual states. Implementing these recommendations is likely to reduce the paperwork burden for states, EPA regions and EPA headquarters through more efficient sharing of grant information and rapid access to draft grant applications and workplans.

The Team believes that Partnership 2000 (see page 24 for a summary of Partnership 2000) meets many of the needs related to grant administration as identified by PE PAA interviewees. By leveraging the functionality of Partnership 2000, future design and development resources could be saved and short-term success for the WIN/INFORMED project realized. The Office of Solid Waste and Emergency Response (OSWER) currently is considering making grant information, guidance, and application instructions available through Partnership 2000.

4. **States and EPA identified several deficiencies in the existing information systems used to support the hazardous waste management program. These deficiencies impede the use of information to support program implementation, as well as planning, grants, and evaluation.**

RECOMMENDATION

The Team endorses the efforts to build a new or revised hazardous waste management information system by migrating the Resource Conservation and Recovery Information System (RCRIS)/Biennial Reporting System (BRS) from a FOCUS platform to an Oracle platform. Additionally, the Team recommends that a new or revised hazardous waste information management system address the specific user needs outlined in Chapter 3, including the following:

- Providing users with desktop access
- Providing users with "hot links" to access other related databases
- Using point-and-click technology
- Making data available on a real-time basis
- Providing the ability to perform ad-hoc queries
- Solving redundant data entry
- Keeping pace with regulatory changes and technology improvements

BUSINESS PROCESS NEEDS

5. **The two national offices representing the national hazardous waste management program (i.e., OSW and OECA) often have competing priorities. Neither OSW nor OECA ranked their priorities in the past. Integration and ranking of national priorities would give managers the ability to plan and implement programs more effectively.**

RECOMMENDATION

The Team recommends that (1) EPA headquarters better integrate and interpret OSW and OECA national priorities for hazardous waste management program, (2) both OSW and OECA review their national priorities and rank them in order of importance or need, and (3) OSW and OECA continue to involve states and EPA regions when implementing the previous two recommendations. The Team acknowledges and supports the efforts already made in this area. For example, OECA and OSW ranked their programmatic priorities for the FY 2000 operating-year priorities meeting in November 1998. Both offices continue to involve states and EPA regions in their planning and priority-setting efforts. Finally, OECA and OSW, as well as other program offices, agreed to coordinate when developing national program guidance.

6. **OSW and OECA national guidance documents for the hazardous waste management program have been issued at different times during the federal fiscal year. States and EPA regions need these guidance documents to be issued concurrently and made available in a more timely fashion. This would allow sufficient opportunity for hazardous waste managers to incorporate national priorities into state and EPA region specific plans.**

RECOMMENDATION

The Team recommends that OSW and OECA distribute final program guidance to a wider audience by April 1. This recommendation concurs with the FY 2000 operating year priorities meeting that also supports the issuance of draft guidance by February 2 and final guidance by April 1. Partnership 2000 should be considered as a candidate for addressing guidance accessibility needs.

7. **States and EPA deal with redundant planning requirements as part of managing the hazardous waste program. Program staff often do not know how a particular plan is used and sometimes fail to recognize the value of the plan itself. To be efficient and effective, planning for the hazardous waste management program should be streamlined. Plans that are developed always should be used.**

RECOMMENDATION

The Team recommends that each organization (i.e., states, EPA regions, and EPA headquarters program offices) streamline their own hazardous waste management planning process and align their processes with other plans where possible (e.g., GPRA Annual Plan, grant workplans). The Team also recommends that each organization requiring another organization to submit a plan review their planning requirements to determine whether the requirements could be streamlined. The Team specifically recommends reviewing the need and use of OSW's Beginning of Year Plan (BYP) and OECA's Memorandum of Agreement (MOA). Finally, where plans are not used, the Team recommends eliminating the plans.

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DOCUMENT ORGANIZATION

This document is organized into an Executive Summary and the following seven sections:

- Chapter 1: Introduction
- Chapter 2: Process
- Chapter 3: Key Findings and Recommendations
- Chapter 4: Stability Analysis
- Chapter 5: Future Directions
- Appendix A: Recommended Data Elements
- Appendix B: List of Acronyms
- Appendix C: ESC Position on PE Recommendations

Chapter 1: Introduction - Identifies the background, purpose, scope, and intended audience of the Program Evaluation Program Area Analysis (PE PAA).

Chapter 2: Process - Delineates the technical approach the PE PAA Team (Team) used in performing the analysis. The chapter identifies the Team members and the U.S. Environmental Protection Agency (EPA) and state hazardous waste program organizations that participated in interview sessions.

Chapter 3: Key Findings and Recommendations - Presents the results of the Team's analysis of information and provides recommendations for improving current systems and processes. This chapter addresses issues relating to burden reduction, potential process improvements, user requirements, and specific data and system needs.

Chapter 4: Stability Analysis - Discusses issues that could affect PE PAA findings and recommendations.

Chapter 5: Future Directions - Addresses the future directions for adopting and implementing the recommendations given in Chapter 3 of this report.

Appendix A: Recommended Data Elements - Lists recommended data elements, including data elements that support fulfillment of the Government Performance and Results Act (GPRA) requirements. These data elements represent the information needed to support the program activities within the PE PAA scope.

Appendix B: List of Acronyms - Defines the acronyms used in this report.

Appendix C: Executive Steering Committee (ESC) Position on PE Recommendations - Addresses the ESC State, Regional, OCEA, and OSW positions on the recommendations made in this report by the PE Team.

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CHAPTER 1

INTRODUCTION

BACKGROUND AND PURPOSE

The United States Environmental Protection Agency (EPA) and the states recognize the importance of reassessing the information needs of the hazardous waste management program. They established the Waste Information Needs/Information Needs for Making Environmental Decisions (WIN/INFORMED) initiative to conduct this reassessment and to design, develop, and/or implement changes to information management. This effort will make high-quality hazardous waste information more readily available to EPA, states, and tribes, which can use the data to support more effective implementation of the hazardous waste program.

The WIN/INFORMED initiative has five phases: *planning*, *analysis*, *design, construction*, and *implementation*. States and EPA chose to conduct separate *planning phases* to capture their own information needs. Completed in fall 1996, these efforts resulted in the development of Information Strategy Plans (ISPs). An ISP is designed to identify natural groupings of program functions and information needs, which are referred to as "program areas."

In their ISPs, both states and EPA identified priority improvements to be made in the information and the information systems used to support program implementation. Specifically, the state ISP identified three priority program areas for analysis: Universe Identification (UID), Waste Activity Monitoring (WAM), and Handler Monitoring and Assistance (HMA). These areas all cover specific program implementation activities. EPA's ISP included Permitting and Corrective Action (PCA) activities in their program implementation program area. Additionally, EPA selected Program Evaluation (PE) as a priority program area. States and EPA agreed to form a partnership to conduct the remaining phases for the five program areas listed in Figure 1, which addresses Resource Conservation and Recovery Act (RCRA) activities and issues related to each program area. The *WIN/INFORMED Project Plan* (June 10, 1998) provides more detailed information on the overall project.

The Program Area Analysis (PAA) examines each program area in detail, considering the adequacy of current information and information management procedures relative to identified program activities and information needs. The end goal of a PAA is threefold: (1) to recommend specific *data elements* to track in the recommended automated systems, (2) to identify and recommend *automated systems* that will meet the needs of the program area, and (3) to identify *process improvements* that both streamline current processes and reduce burden. The purpose of this report is to present the results and recommendations of the *analysis phase* of the PE program area, covering plans, grants, and evaluations.

Figure 1. Major Issues and Activities Covered by Each Program Area

PROGRAM AREAS	RCRA ACTIVITIES	RCRA ISSUES
Program Evaluation	*Planning* • Annual Plans (e.g., RCRA Implementation Plan [RIP]/ Beginning of Year Plan [BYP]) • Strategic Planning • Office of Enforcement and Compliance Assurance Memorandum of Agreement (OECA MOA) *Evaluations* • Assessments of state, EPA regional, and EPA headquarters programs *Grants* • 8001 and 3011 Cooperative Agreements • Performance Partnership Grant (PPG)	• GPRA measures/reporting • BYP vs. Annual Plan • Environmental indicator development and tracking • National Environmental Performance Partnership System (NEPPS)
Universe Identification	*Facility reporting* • Notification • Part A • Biennial Reports *Handler universe categories* • Generators (e.g., small quantity generators [SQG], large quantity generators [LQG], universal wastes) • Transporters (e.g., hazardous waste, used oil, commercial) • Treatment, storage, and disposal facilities (TSDs) *Regulated unit categorization*	• Facility Identifier Initiative • Facility location (e.g., latitude/longitude) • Generator definitions • Federal/state definitions of hazardous waste • Definition of solid waste • Universe issues (e.g., used oil) • Standard Industrial Classification (SIC Code)
Waste Activity Monitoring	*Waste monitoring* • Manifest tracking • Waste minimization activities (e.g., review waste minimization plans) • Waste handling onsite *BRS reporting*	• Government Accountability Office (GAO) Waste Minimization Issues • Waste Minimization National Plan • Toxics Release Inventory (TRI) Expansion Proposal • The types of waste units to be tracked • Waste characteristics • RCRA coding system • One-stop reporting
Handler Monitoring and Assistance	*Enforcement* • Generators, transporters • Compliance activities • Generators, transporters *Inspections* • Generators, transporters *Technical assistance*	• Definition of "in compliance" • Consistent definitions of enforcement actions • Enforcement Response Policy revisions • Risk information for targeting compliance/enforcement • Sector-based approach

Figure 1. Major Issues and Activities Covered by Each Program Area

PROGRAM AREAS	RCRA ACTIVITIES	RCRA ISSUES
Permitting/ Corrective Action	*Permitting/corrective action (CA) implementation* • Includes permitting, closure, clean closures, post closure • CA under permitting, enforcement, and voluntary *Site-specific risk assessments* *Permitting/CA enforcement*	• Site characteristics • Permits Improvement Team (PIT) recommendations • Types of permits • Hazardous Waste Identification Rule (HWIR) Media • Subpart S • Voluntary/alternate authority corrective actions

SCOPE OF THE PROGRAM EVALUATION PROGRAM AREA

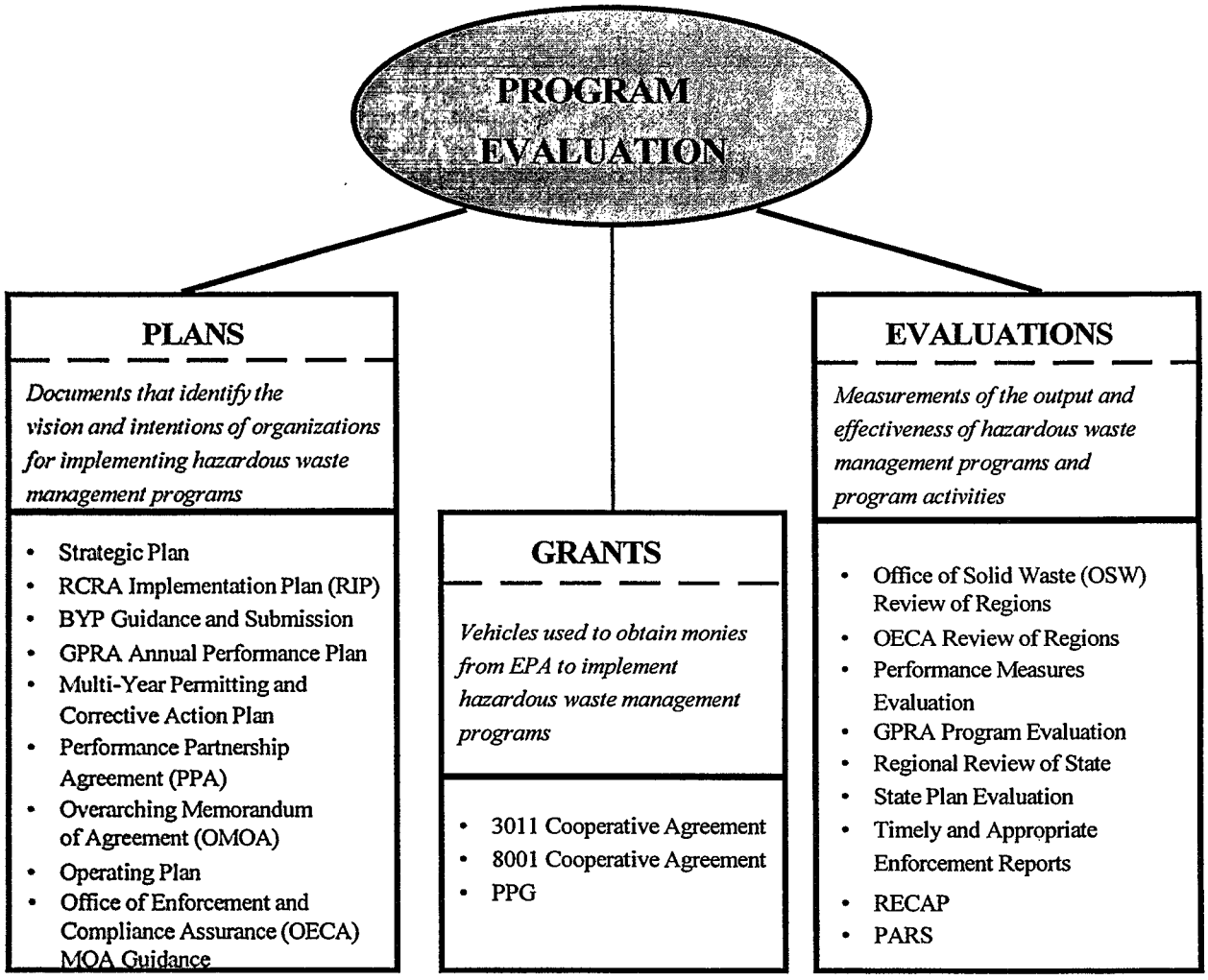
The scope of the PE PAA has evolved over the life of the project. Initially, the scope included authorization, budget, GPRA program assessments, planning, grants, and evaluation activities for the RCRA Subtitle C program. As the Team analyzed the effects of including a large number of waste management activities, they refined the scope to focus on activities with the greatest national significance and to pursue efforts that would ensure effective and efficient completion of the project within the schedule and the resources allocated. The final scope of the PE PAA includes three major subject areas: plans, grants, and evaluations. Figure 2 provides definitions and examples of these three areas.

INTENDED AUDIENCE

The intended audience for this report is state, EPA regional, and EPA headquarters hazardous waste program managers and the WIN/INFORMED ESC. The report is designed to communicate an overview of results of the PE PAA, including the specific data requirements related to hazardous waste program plans, grants, and evaluations. This report also conveys general recommendations for managing information more effectively (e.g., user system requirements) and identifies potential process improvements for hazardous waste program activities related to plans, grants, and evaluations.

More detailed data requirements, such as identification of relationships between groups of data, are available in the technical support documentation intended for the PE Design Team. The PE Design Team is responsible for determining what, if any, information systems will be developed to address the data and system requirements included in this report.

Figure 2. PE PAA Scope



CHAPTER 2

PROCESS

TEAM ORGANIZATION

A multi-organizational team that included hazardous waste program subject matter experts from states, EPA regions and EPA headquarters Office of Solid Waste (OSW) and Office of Enforcement and Compliance Assurance (OECA) had responsibility for completing the PE PAA. The Team consisted of the following individuals:

- Lillian Bagus, EPA OSW (co-lead)
- Leslie Brennan, New York Department of Environmental Conservation (co-lead)
- Phyllis Donahue, EPA OECA
- Harriett Jones, EPA Region VII
- David Langston, EPA Region IV
- Trisha Mercer, EPA OSW
- Anne Price, Oregon Department of Environmental Quality
- Dina Villari, EPA OSW

The Team was intended to serve as a representative sample of the overall RCRA community. Interviews with the Team and their home organizations were the primary source of information for the PE analysis. The recommendations contained within this document are based on the information collected during these interviews. A three-level process was used as a quality control mechanism for this report and associated data element recommendations. First, the Team reviewed the accuracy of interview recordings, subsequent report results, and Team recommendations. Second, broader input was sought through a critical review of the draft report. The critical review, conducted in July 1998, sought input from RCRA program and information management staff within EPA Headquarters' OECA and OSW, 6 EPA regional offices, 10 state RCRA program offices, and the WIN/INFORMED CC. Third, in September 1998, a second draft of the report was widely distributed in a national review. The reviewers included both RCRA program and information management staff within EPA Headquarters' OECA and OSW, 9 EPA regional offices, 22 states, and the WIN/INFORMED CC.

TECHNICAL APPROACH

The entire WIN/INFORMED project is using a standard methodology called Information Engineering Methodology (IEM) to analyze, design, and implement information management systems for the hazardous waste management program. For the PE analysis, IEM provided a

framework for collecting and analyzing information on the plans, grants, and evaluations portions of the hazardous waste management program. The Team's job was to determine, through interviews with program staff and managers what types of activities related to plans, grants, and evaluations are performed in the program and what information is needed to support these activities. Activities performed within the program and the information needed for those activities should drive the development of information systems. In addition to identifying specific data elements, the ESC instructed the Team to identify processes in the program that could be improved. This part of the analysis extended beyond the traditional data needs of the program and focused on actual program processes (e.g., the planning process). The recommendations included in this report are based on the findings developed by the Team through the analysis of information collected during program interviews.

The centerpiece of the PAA project and the foundation for the development of this report and the data and activity model was the series of interview sessions with Team member states, EPA regions, and EPA headquarters, as listed in Figure 3. Several of the states and EPA regions invited additional state and EPA regional hazardous waste program experts from nearby organizations to participate in the interview sessions (e.g., EPA Region IV invited Georgia representatives to participate).

Figure 3. PE Interview Schedule

ORGANIZATION	LOCATION	DATE(S)
New York Department of Environmental Conservation EPA Region II	Albany, NY	9/29/97 - 10/3/97
EPA Region VII	Kansas City, KS	10/6/97 - 10/10/97
EPA Region IV Georgia Department of Natural Resources	Atlanta, GA	10/27/97 - 10/31/97
Oregon Department of Environmental Quality EPA Region X	Portland, OR	11/3/97 - 11/7/97
EPA Office of Solid Waste and Emergency Response (OSWER)	Arlington, VA	12/4/97
EPA RCRA GPRA Team	Arlington, VA	12/5/97
EPA OSW Communications, Information, and Resource Management Division (CIRMD)	Arlington, VA	12/10/97
EPA OSW Permits and State Programs Division (PSPD)	Arlington, VA	12/11/97
EPA Region V Wisconsin Department of Natural Resources Illinois Environmental Protection Agency	Chicago, IL	1/12/98 - 1/16/98
EPA OECA	Washington, DC	1/27/98 - 1/30/98

Hazardous waste program experts from each organization participated in one of ten interview sessions. Each session lasted from one to five days depending on the organization's size, complexity, and availability of staff. In all cases, the Team attempted to include staff from several organizational levels ranging from program staff to senior management to secure the broadest representation of the types of activities performed and the information needed for hazardous waste management plans, grants, and evaluations. These interviews had the participants identify the following:

- Why and how the hazardous waste programs use information related to plans, grants, and evaluations
- The information systems currently used to support plans, grants, and evaluations
- The adequacy of the current information and information systems
- Where information needs are not being met
- How information needs are changing or may change in the future
- What types of system functions are needed to support future hazardous waste program activities related to plans, grants, and evaluations

Additionally, participants provided detail on these issues:

- **Benchmarking**: exemplary programmatic practices. An example is Oregon's effort to consolidate planning activities.
- **Process Improvements**: suggestions for new or modifications of current programmatic processes to increase efficiency and cost-effectiveness. An example is the recommended synchronization of EPA planning guidance documents.
- **Reporting Burden Reduction**: suggestions for decreasing the workload associated with entering data into existing information systems and reporting to EPA regions and/or EPA headquarters. An example is eliminating any duplicate data reporting requirements between the BYP and the MOA.
- **User Requirements**: necessary system technology or functionality that users need to complete their job. Examples include desk-top access to data and on-line query capabilities.
- **National Data**: suggestions for the data needed to be shared nationally (i.e., beyond an EPA regional and state pair) on a consistent basis. This includes data that support the basic implementation of the program and data that need to be shared consistently between states and EPA regions to implement the program. An example of national data is "core measures", reported by states to EPA.

The data on which this document and the technical support documentation are based have been reviewed by the participating organizations for accuracy. After each interview session, the Team drafted detailed session summaries for review by the participants in that session. The summaries were revised based upon participant comments.

Following completion of all interview sessions, the Team analyzed the collected information and developed the findings and recommendations covered in this report. The findings and recommendations address the specific set of information (i.e., data elements) needed to perform plans, grants, and evaluation activities in the hazardous waste management program, the system support needed to enhance those functions (e.g., the tracking and accountability system), a list of specific user needs that apply to any new system in the hazardous waste management program (e.g., desk-top access), and the process improvements needed to better implement the plans, grants, and evaluation activities within the hazardous waste management program (e.g., streamline the planning process).

CHAPTER 3

KEY FINDINGS AND RECOMMENDATIONS

This chapter highlights the key findings and recommendations of the PE PAA. These results, based on concerns raised during the PE PAA interviews, focus on information management needs and process improvements related to plans, grants, and evaluations. As noted in Chapter 2, the Team asked interview participants to address the issue of burden reduction. This request included suggestions for decreasing workloads associated with reporting to EPA regions and/or headquarters, as well as entering data into existing information systems. Rather than address burden reduction as a separate issue, the Team addressed burden reduction within each of the relevant discussions in this chapter.

During the interview sessions, state, EPA regional, and EPA headquarters participants raised issues related to current program information needs within the scope of other WIN/INFORMED program area analysis efforts. This report does not address these issues. The WIN/INFORMED CC will brief other WIN/INFORMED program area teams on the findings and issues that affect their program areas.

Interviewees also raised certain programmatic or policy issues that were deemed beyond the scope of the PE PAA. For example, interviewees viewed requirements associated with GPRA and NEPPS as incompatible, with GPRA requiring specific accountability and NEPPS offering broad flexibility. Because such programmatic or policy issues are not within the scope of this analysis effort and are being addressed in other fora, the Team did not analyze whether these issues were well founded and did not develop recommendations on how to address these concerns.

The WIN/INFORMED project identified the need for a culture change in information identification, collection, and management for the hazardous waste program. The Team determined that a change in culture is needed in these three ways:

(1) Make information management a high priority.

(2) Assume responsibility as data owners. Accurate and complete data and information are critical to sound decision making, especially in science-based organizations. It is our responsibility to ensure the quality of information needed to make decisions and implement the hazardous waste management program.

(3) Integrate program and information management. Currently, there often is a division of duties between information management and development and implementation of the program. In many cases, hazardous waste program staff develop regulations and guidance without effectively consulting with information technology staff. Information management cannot be the sole responsibility of the information technology staff. Hazardous waste program staff must participate as knowledgable and vested partners.

The remainder of this chapter is divided into three categories of findings and recommendations: data needs, information system needs, and business process needs. The data needs category includes the Team's findings and recommendations related to establishing a base set of data elements for hazardous waste management program plans, grants, and evaluations. The information system needs category includes the Team's findings and recommendations on developing and/or adopting automated information systems for program plans, grants, and evaluations. This category also presents a discussion of the generalized issues related to the current systems supporting the hazardous waste management program. Finally, the business process needs category includes the Team's findings and recommendations on specific process issues integral to the implementation of the hazardous waste program.

DATA NEEDS

1. States and EPA should agree upon a base set of national data elements that will be used in national and regional plans, grants, and evaluations, including reports on the accomplishments of the hazardous waste management program.

PE PAA interviewees agreed that a base set of defined data elements should be used for plans, grants, and evaluations, including reporting the accomplishments of the hazardous waste management program. Interviewees further agreed that this set of data elements should be kept to the absolute minimum to ease the burden of reporting and tracking requirements. Interviewees also suggested that the Team identify both the current and/or future use of each recommended data element. They believed this would facilitate the elimination of unnecessary and burdensome collection of data that are not and will not be used to fulfill program planning and evaluation needs. Additionally, the CC required that each PAA Team identify or develop definitions for any data elements the PAA Team recommends. The Team identified how/where the data element currently is used or is expected to be used and whether states and EPA regions are expected to establish projected commitments (e.g., EPA regions will inspect eight percent of the large quantity generator universe) or report accomplishments after the fact.

RECOMMENDATIONS

Based on the interviews, the Team recommends a base set of data elements that EPA and states will use for planning, evaluating, and reporting the accomplishments of the hazardous waste management program. Figure 4 identifies these data elements and Appendix A provides a detailed listing with data element definitions. State, EPA regional, and EPA headquarters stakeholders must agree that:

(1) this list of data elements is the minimum set needed for national program planning, grants, and evaluation purposes,
(2) the data element definitions are accurate, and
(3) the history and owner requirements for each data element are correct.

The hazardous waste programs currently report and track each of the recommended data elements. The Team is not recommending any new data elements to support plans, grants, and evaluations, although certain GPRA measures and baselines are under development.

In choosing data elements to comprise this minimum set, the Team tried to limit the elements to those mandatory elements already reported by states and EPA regions through BRS or RCRIS. While these comprise the majority of the list, there also exist data elements used by EPA to satisfy GPRA accountability requirements (e.g., reduction in PBT chemicals in waste streams). Because the data elements represent only the *minimum* information needs for the national hazardous waste management program in the planning, grants, and evaluation area, organizations (EPA headquarters, EPA regions, and states) may have additional specific information needs related to plans, grants, and evaluations outside of the data elements identified here. For example, states and EPA regions may wish to track regional/state initiatives or states may have state-only initiatives such as voluntary clean up actions which must be tracked but aren't necessarily federally reported. In the case of EPA Headquarters, OSW will be adding those GPRA measures associated with Subtitle D in order to consolidate reporting of waste program progress. The information system recommended in Finding 2 of this chapter is structured with the ability to accommodate additional data elements as needed.

The Team expects that the identified data elements might change as the subsequent implementation PAAs are conducted and issues are further discussed among states and EPA. In the long term, the Team recognizes that the list of data elements will evolve as program priorities change, new evaluation measures are developed, and relationships among stakeholders change. The state and EPA acceptance of the data elements listed in Appendix A denotes agreement that these data elements are a starting point for a national hazardous waste management information system.

Figure 4. Recommended Data Elements for Planning, Evaluating, and Reporting the Accomplishments of the Hazardous Waste Management Program for the National System

RCRIS Data Elements
GPRA Corrective Action Baseline
RCRA Facility Assessment (RFA) Completed
Notice of Contamination
Determination of Need for a RCRA Facility Investigation (RFI)
Corrective Action (CA) Prioritization
RFI Imposition
RFI Workplan Approved
RFI Report Approved
Referred to a Non-RCRA Authority
Stabilization Measures Evaluation
CMS Imposed
CMS Workplan Approved
CMS Approved
Decision on Petition for No Further Action
Date for Public Notice on Proposed Remedy
Date for Remedy Selection (CM Imposed)
Corrective Measures Design Approved
Corrective Measure Implementation (CMI) Workplan Approved
Determination of Tech Impracticability
Certification of Remedy Completion
Stabilization Measures Implemented
Stabilization Construction Completed
Human Exposures Controlled Determination (GPRA)
Release to Groundwater (GW) Controlled Determination (GPRA)
CA Process is Terminated
Plan Received - Closure
Plan Approved - Closure
Receive Closure Certification
Closure Verification
GPRA Hazardous Waste Controls/Permits Baseline Universe
Part A Submitted
Part A Determination
Process Determination
Part B Call-In
Pre-Compliance Certification Submitted

Figure 4. Recommended Data Elements for Planning, Evaluating, and Reporting the Accomplishments of the Hazardous Waste Management Program for the National System (continued)

RCRIS Data Elements (continued)
Pre-Compliance Certification Review Completed
Notification of Compliance Testing
Case-By-Case Compliance Extension Requested
Loss of Interim Status (LOIS)
Case-By-Case Extension Granted
Part B Received
Notification of Automatic Extension
Compliance Certification Submitted
Compliance Certification Review Completed
Compliance Extension Expires
Trial Burn Conducted
Public Notice
Final Determination (Operating Permit)
GPRA Hazardous Waste Controls/Post-Closure Permits Baseline Universe
Post-Closure Part B Call-In
Post-Closure Part B Received
Public Notice
Final Determination (Post Closure Permit)
Plan Received - Closure/Post-Closure
Plan Approved - Closure/Post-Closure
Receive Closure Verification
Closure Verification
Verbal Informal Enforcement Action
Written Informal Enforcement Action
Combination-Informal Enforcement Action
Initial 3008(a) Compliance Order
Initial Imminent Hazard Order
Initial Monitoring and Testing Order
Initial 3008(h) Interim Status Corrective Action Orders
Notice of Non-Compliance
Combination-Initial Formal Enforcement Action
Final 3008(a) Compliance Order
Final Imminent Hazard Order
Final Monitoring and Testing Order
Final 3008(h) Interim Status Corrective Action Orders

Figure 4. Recommended Data Elements for Planning, Evaluating, and Reporting the Accomplishments of the Hazardous Waste Management Program for the National System (continued)

RCRIS Data Elements (continued)
Federal Facility Compliance Agreement
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 106 Order
CERCLA 104 Order
Combination-Final Formal Enforcement Action
Referral to Attorney General
Referral to Department of Justice
Referral to District Attorney/County Attorney
Combination-Judicial Referral
Civil Action for Compliance
Civil Action for Imminent Hazards
Civil Action for Compliance with Previously Issued Action
Civil Action for Interim Corrective Action
Civil Action for Monetary Penalties
Combination-Civil Actions
Consent Decrees
Judicial Orders
Criminal Actions
State to EPA
EPA to State
EPA RCRA to EPA CERCLA
Federal Facility Referral to EPA Headquarters
Combination-Administrative Referral
Date of Enforcement Action
Date of Evaluation
Corrective Action Oversight Inspection
Case Development Inspection
Compliance Evaluation Inspection
Comprehensive Groundwater (GW) Monitoring Evaluation
Compliance Schedule Evaluation
Financial Record Review
RCRA CEI Performed with Screening Checklist
Comprehensive and Coordinated Inspection with CEI
Detailed Multimedia Inspection with CEI

Figure 4. Recommended Data Elements for Planning, Evaluating, and Reporting the Accomplishments of the Hazardous Waste Management Program for the National System (continued)

RCRIS Data Elements (continued)
Multimedia Screening Checklist Only
Non-Financial Record Review
Operation and Maintenance Inspection
Other Evaluation
Determined Not to Be a Significant Non-Complier
Determined to Be a Significant Non-Complier
Sampling Inspection
Compliance Assistance Activity
Facility Self Disclosure
Area of Violation
Date Violation Determined
Actual Resolved Date
Scheduled Response Date
SEP/Enforcement Milestone Code
Type of Penalty Amount Indicator
Penalty Amount
Multimedia Code
BRS Data Elements
Waste Quantity Unit of Measure
On-Site Handling
Off-Site Handling
Quantity Generated Current Year
Generator Status
Reduce persistent, bioaccumulative, and toxic (PBT) chemicals in hazardous waste streams; baseline

Figure 4. Recommended Data Elements for Planning, Evaluating, and Reporting the Accomplishments of the Hazardous Waste Management Program for the National System (continued)

Other Data Elements
GPRA enforcement and compliance assurance facility baseline
GPRA enforcement and compliance assurance high priority areas baseline
GPRA enforcement and compliance assurance small business baseline
GPRA enforcement and compliance assurance use of incentives policies
GPRA enforcement and compliance assurance use of PPAs
Increase amount of hazardous waste safely recycled; baseline
Reduce combustion emissions; baseline

INFORMATION SYSTEMS NEEDS

2. States and EPA cannot easily track the progress of the hazardous waste management program or readily relate this progress to evaluation and planning efforts. To accomplish these objectives, states and EPA specified the need for an automated system to track program accomplishments.

The hazardous waste program activities performed by states and EPA often support multiple priorities set internally or imposed externally. States and EPA increasingly are required to track accomplishments to demonstrate accountability and progress against specific goals. Generally, each organization has internal goals or milestones and requires tracking and reports of progress toward meeting those goals or milestones. States and EPA regions negotiate grant commitments and track accomplishment of these commitments. Under GPRA, EPA has to report annual progress to Congress and consider current progress when revising strategic plans and developing annual plans. Some state legislatures have imposed similar requirements (e.g., setting goals, tracking accomplishments, and using the results in future planning efforts). Several states also publish state of the environment reports.

PE PAA interviewees want a way to determine program performance more easily and quickly. Program performance results would be used for internal program management and planning and for reporting accomplishments to a partner organization (e.g., EPA regions to EPA headquarters, states to EPA regions, grantees to grantors) and to the public. The reports for each of these audiences would contain different levels of information and would use different formats.

For instance, a state may decide to use the system to manage its program internally and to report to the EPA region. The state may need to add to or delete from its set of internal reporting data to report to the EPA region. Internal reports may include technical jargon or data not useful to the public, while bar charts or other graphics used for public reporting may not be specific enough to support program planning and management. Because of these different uses and audiences, an automated system should have the capability to aggregate and disaggregate data and provide a variety of high-level and detailed reports, charts, and graphics.

Program accomplishments can be quantitative (e.g., nine permits issued, emissions reduced by 50 percent) or narrative (e.g., rule promulgated). Both states and EPA are trying to move from activity counts (e.g., 14 technical assistance visits completed) to indicators of environmental progress (e.g., decrease in cancer cases). Interviewees indicated the system should have the capability and flexibility to accommodate these various types of measures, including goals, milestones, and actual accomplishments. In addition, some interviewees want to link their work plan activities to specific RCRA handlers, as appropriate (e.g., nine inspections performed at nine specific facilities). Interviewees want the system to accommodate measures for pollution prevention and RCRA Subtitle D.

Some interviewees want the ability to avoid duplicate data entry and recommend that a system meeting these needs have direct links to other databases, such as TRI, RCRIS (if the Design Team decides a separate system is appropriate), and BRS, to "read" relevant data elements pertinent to the program area. Finding 4 of this chapter also addresses this capability.

RECOMMENDATIONS

The Team recommends an automated system designed to meet these objectives:

- Track actual accomplishments against goals or milestones
- Accommodate all types of measures of success, including quantitative, qualitative, narrative, and environmental indicators
- Provide flexibility to enable states, EPA regions, and headquarters program offices to adopt it to meet their own internal reporting needs
- Provide time-specific reports (e.g., quarterly, fiscal year)
- Aggregate and disaggregate data
- Provide easy data retrieval and report writing

- Provide a variety of high-level reports, charts, and graphics
- Link activities to specific RCRA handlers
- Provide links to other relevant databases to "read" data elements where necessary

A system with these capabilities would give hazardous waste managers at all levels the ability to determine program performance more easily, regularly, accurately, and effectively. States and EPA could use the results for internal program planning and management, reporting purposes, and public education. Figures 5, 6, and 7 provide example reports and screens that might represent the types of information wanted by PE PAA interviewees.

Figure 5. Example Input Screens for Performance Accomplishments Tracking System

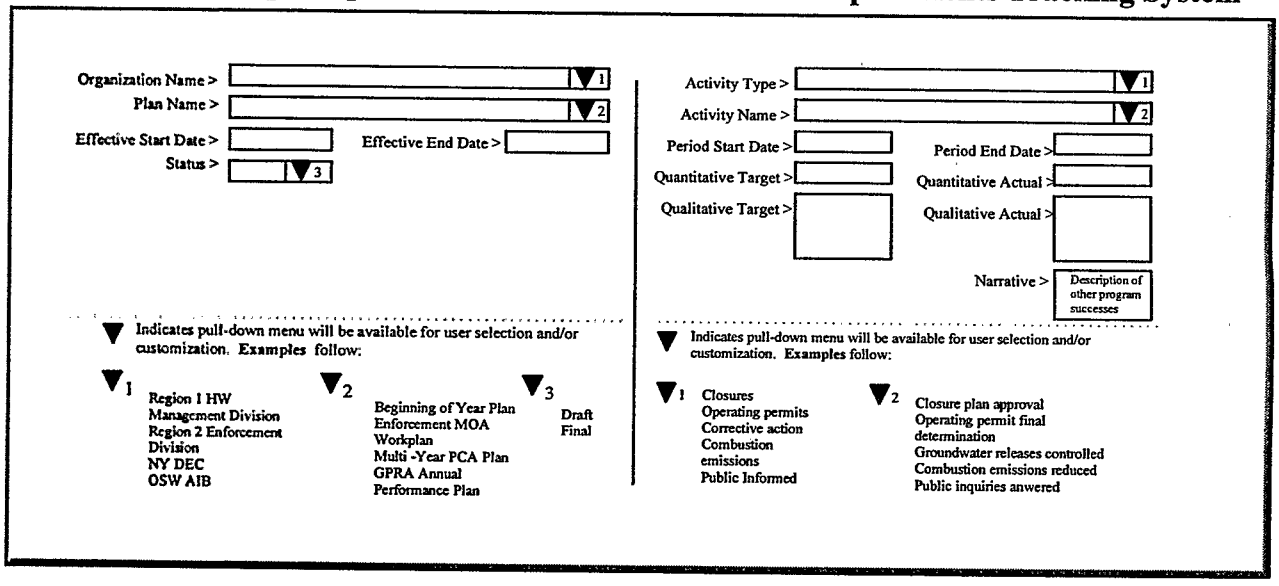
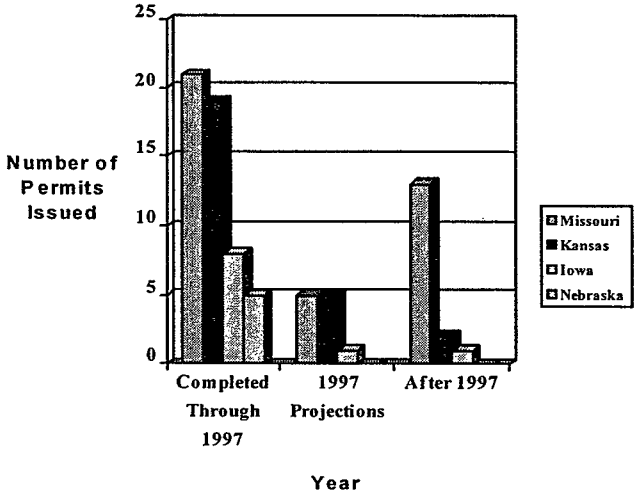
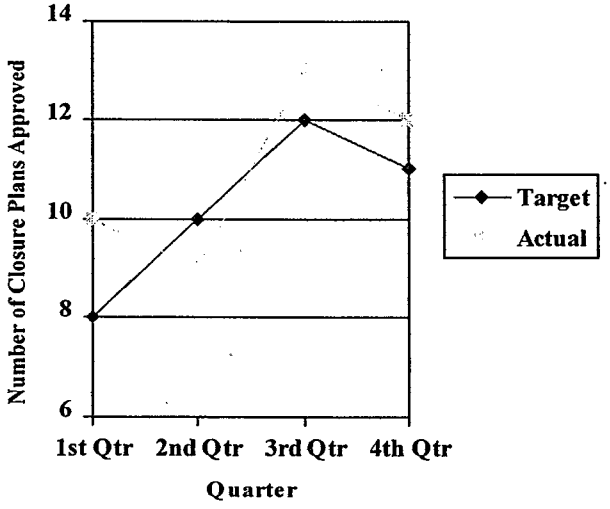
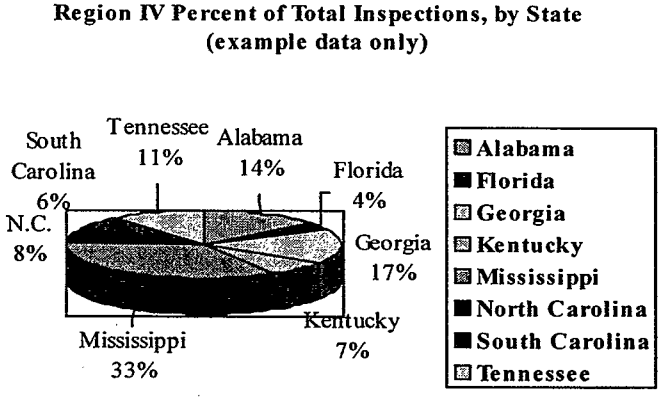


Figure 6. Example Report Output from a Performance Accomplishments Tracking System







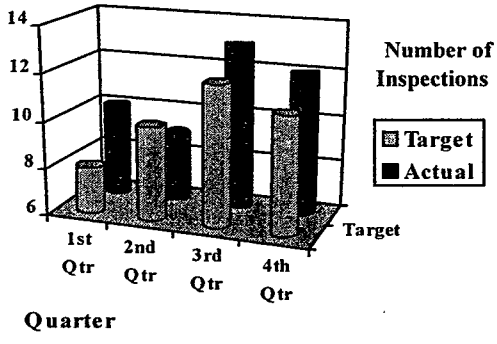


Figure 7. Example Report Output for a Performance Accomplishments Tracking System

US EPA RCRA Program
FY 98 GPRA Accomplishments Report
Region: All

Performance Measure	Measure Type	Baseline	Current Year Targets	FY98 Actual	Percent of Targets
1. Control releases - municipal solid waste landfills	Key	3,536 Municipal Solid Waste Landfills	1250	1201	96.1%
2. Reduce combustion emissions	Key	1994 hazardous waste combustor emissions of dioxins/furans, particulate matter, and acid gases	370	300	81.0%
3. Reduce PBT chemicals in hazardous waste streams	Key	1991 GPRA Baseline	50%	----	----
4. Inspect LQG Universe	Key	---	8%	8%	100%

The development of a program accomplishments tracking system will meet the planning needs of some organizations and will be less burdensome than current planning requirements. For instance, if EPA regions use the program accomplishments tracking system to enter projected and actual accomplishments of the hazardous waste management program, OSW may determine that certain components of the BYP are no longer needed.

If this recommendation is approved and supported by the ESC, the Design Team, working with PE PAA Team members, will decide whether to design and construct a separate system or to modify an existing system to address the above recommendations. The Design Team also will determine how to address each of the above recommendations. For example, the Design Team will address quality assurance issues when determining the feasibility of links to other databases.

3. **The current process of hazardous waste grant application negotiation and management is overly burdensome. State, EPA regional, and national hazardous waste managers want a more rapid, automated grant negotiation and approval process. In addition, states and EPA regions want the ability to search and retrieve information related to their own and other grant projects.**

Currently, grant negotiation and application is a manual process. Comments and responses to comments on state grant workplans, including the negotiation of work activities, typically are communicated through a series of telephone conversations, letters sent through the U.S. Postal Service, the Internet, and/or face-to-face meetings. This approach causes state, EPA regional, and national hazardous waste managers to spend a significant amount of resources and time negotiating and finalizing grant applications and workplans. The negotiation of workplans is an essential process, and the automation of this process can make it more efficient.

During the PE PAA interview sessions, states and EPA regions indicated an interest in negotiating EPA grants (i.e., 3011, 8001, and PPG) electronically, including the ability to enter and track grant application information and workplans more easily and efficiently. Interviewees also want the ability to negotiate workplan activities by commenting on drafts and responding to comments in an automated manner. Although this can be accomplished via electronic mail, users believe that a grant-specific framework for automating the negotiation process would require fewer resources and less time. Such a framework would support a more uniform and organized process that also allows for "tickler" notifications, electronic signature, movement of the grant application through the necessary processes, notification of grant award, and interfacing with other EPA grant and financial systems.

In addition to automating the grant negotiation process, interviewees specified the need to search and retrieve grant information by issuing organization, keyword, location, or media. These capabilities would give a tribe, state, EPA region, or other organizational unit the opportunity to learn about grant projects and programs being implemented around the country. Some interviewees want to view listings of all federal grant programs applicable to the hazardous waste management program, perhaps by having "hotlinks" to specific websites offering this information. This capability would be especially helpful for organizations that have resource constraints and are seeking alternative financial assistance. Finally, some states expressed interest in having on-line capabilities for viewing the apportionment of grant monies by EPA headquarters to the EPA region and the EPA regional apportionment of grant monies to individual states. Figure 8 lists all system requirements related to hazardous waste management grants.

Figure 8. Summary of System Requirements Related to Hazardous Waste Management Grants

- Ability to enter and review grant applicant information
- Ability of grant applicants to complete draft and final versions of applications (e.g., application form) and attach workplan information
- Ability of grant applicants to establish select user groups to receive draft and final grant applications and workplans for review and approval
- Ability of grant issuing organization (e.g., EPA region, state) to negotiate grant application
- Ability of issuing organization to review grant application information and indicate the application status (e.g., approved, denied)
- Ability of stakeholders to access a list of all EPA grants awarded to stakeholders, with the capability of sorting this information by organizational unit, type, media, fiscal year, awarding organization, and keyword
- Ability to access electronically the apportionment of grant funds by EPA headquarters to EPA regions (not specific to individual states) and by EPA regions to individual states
- Ability of stakeholders to access a list of all federal grant programs

The Team identified an automated EPA/state pilot system, Partnership 2000, the capabilities of which appear to address many of the system requirements related to grants as discussed above. Currently, the system is being piloted in five states and five EPA regions, as well as two EPA headquarters media offices. Partnership 2000 is a Lotus Notes and Internet based application specifically designed to reduce the paperwork associated with grants administration. Partnership 2000 allows an electronic means for all grants processing and communication (such as posting, distribution, and approval between EPA headquarters, EPA regions and grantees). It also provides an on-line mechanism and central location for posting and accessing grant-related materials, such as guidance, planning documents, and final workplans, accommodates the selection of document reviewers and automatic distribution to selected reviewers, and allows reviewers to transmit comments to a document's author. Partnership 2000 provides the ability to comment on and respond to comments between the grant applicant and the issuer, as well as the ability to obtain electronic signature approvals for EPA grants. Access to draft materials and

portions of finalized materials (e.g., sensitive budget information) can be limited to specified users. Final grant applications and workplans can be posted within the system for public use. Users also can search for and retrieve grant information by type, location, organization, and media[1].

RECOMMENDATIONS

The Team recommends that hazardous waste managers and staff have access to an automated system that addresses user needs related to the grants process, as described above. The capabilities of this system include providing (1) on-line negotiation of grant applications and workplans, (2) electronic submittal, distribution, and approval of grant applications and workplan activities, and (3) on-line access to the apportionment of grant funds by EPA headquarters to EPA regions and by EPA regions to individual states. Implementing these recommendations is likely to reduce the paperwork burden for states and EPA through more efficient sharing of grant information and rapid access to draft grant applications and workplans. Figure 9 shows screens with examples of grant-related information as specified by users.

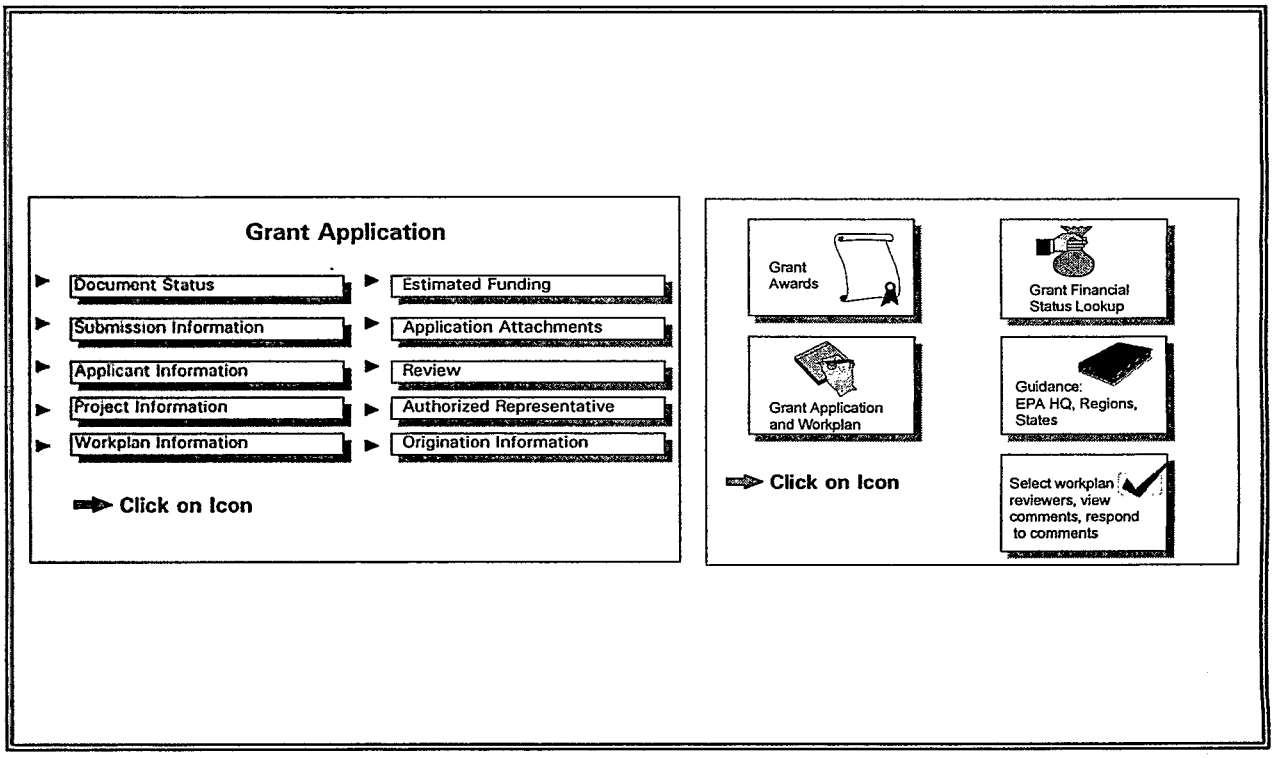
The most recent *WIN/INFORMED Project Plan* specifies system design and development efforts for PE PAA beginning in winter 2002. The Team, however, recommends that further investigation of the Partnership 2000 system functionality be considered sooner. The Team believes that Partnership 2000 meets many of the needs related to grant administration as identified by PE PAA interviewees. By leveraging the functionality of Partnership 2000, future design and development resources could be saved and short-term success for the WIN/INFORMED project realized. It also should be noted that Partnership 2000 meets user requirements discussed in Finding 2 of this chapter, further strengthening the Team's recommendation that this system be considered for use by the hazardous waste management program.

4. States and EPA identified several deficiencies in the existing information systems used to support the hazardous waste management program. These deficiencies impede the use of information to support program implementation, as well as planning, grants, and evaluations.

PE PAA interviewees identified a number of deficiencies in the current systems' ability to support the hazardous waste management program. These deficiencies relate to information needs for hazardous waste management plans, grants, and evaluations and the needs associated

[1] OSWER is considering making grant information, guidance, and application instructions available electronically through Partnership 2000.

Figure 9. Example Screens for a Grant-Related Information System (Source: Partnership 2000)



with all other aspects of implementing the hazardous waste management program. The Team believes it is important to present these usability problems, even though many of the problems are not specific to this analysis and have been identified in other RCRIS/BRS fora and reports. Many of the problems identified here likely will impact future PAA efforts, and some already are being addressed by other WIN/INFORMED activities (e.g., migration of RCRIS and BRS from a FOCUS platform to an Oracle platform) and other EPA and state activities.

The primary users of RCRIS and BRS data are state and EPA regional implementers of hazardous waste management programs, as well as other interested public parties. The Team confirmed user and ISP findings that the current RCRIS and BRS mainframe Focus databases are difficult to use. In addition, users are frustrated by the complexity and redundancy of other state, EPA regional, and national systems that often overlap and sometimes conflict with RCRIS and/or BRS.

Users want to continue strong partnerships among state, EPA regional, and EPA headquarters personnel to address concerns and issues, especially regarding data quality. Users specified that in some states and EPA regions, as well as at EPA headquarters, there is a lack of effective communication between program staff and data management staff. To maintain high quality data, users believe managers must provide sufficient resources so as not to impede the success of any future system improvements. Program and data management staffs must be trained and provided with appropriate guidance on working with information systems for the hazardous waste management program.

Based on PE PAA interviews, RCRIS/BRS users indicated six specific requirements that would make working with current systems more effective and efficient:

- **Users want one access point for linking or retrieving information from hazardous waste program databases, including external databases that contain information relevant to the hazardous waste management program.** Users indicated a need to have access to relevant databases from one, central access point, preferably from their desktop. For instance, users need one access point to information contained in such databases as Dun & Bradstreet, TRI, and Docket. When EPA regional staff access information on a specific facility through RCRIS, it would be useful to be able to obtain financial and other information through a link to Dun & Bradstreet. Users understand that integrating information from multiple systems into a single application can be technically difficult or impossible to accomplish but believe that providing one point of access to the more commonly used systems (e.g., RCRIS, BRS, TRI) is feasible, needed, and possible to achieve with today's technology.

- **Users want desktop access through a friendlier system interface, such as point-and-click technology.**[2] RCRIS/BRS mainframe FOCUS databases are difficult and time-consuming to use. Users want a faster, simpler, more efficient method of retrieving and viewing hazardous waste data from their desktop. To help address this issue, EPA Region I has developed a dBase tool, RCRIS INFO. While not a point-and-click technology, RCRIS INFO is an electronic report of data extracted from RCRIS and BRS that can be queried quickly and easily by the user at his or her desktop. During the interview sessions, the Team found that other EPA regions are using the same or similar systems or desired to obtain such a system.

[2]In support of the WIN/INFORMED initiative, OSW's Information Management Branch (IMB) currently is addressing this long-term user requirement. IMB will migrate RCRIS and BRS from their current software/hardware platform (i.e., FOCUS on the EPA mainframe) to a new software/hardware platform (i.e., Oracle on a central EPA UNIX server with a Web browser user interface).

- **Users want hazardous waste program data available on a real-time basis.** To make the best decisions possible, users indicated a need to have real-time data. A real-time data system that all users could access simultaneously would eliminate the current resource intensive attempts to reconcile data on reports that were pulled at different times from different levels of hierarchical databases (i.e., implementer, merge, oversight).

- **Users want the ability to perform ad-hoc queries to eliminate the inefficiencies associated with retaining specialized computer services to retrieve data.**[3] Because of the dynamic nature of program needs, users often are required to obtain and analyze data in new or different formats. Users need the flexibility to develop queries on an ad-hoc basis. To accomplish these needs in EPA Region IV, RCRIS data management staff developed customized reports for users. Although this approach has achieved a certain level of success, many system users want to perform these queries themselves. To conduct such studies as trend analysis, users indicated a need to have the ability to generate graphs, such as bar graphs and pie charts, to display certain types of information. Additionally, users indicated a need for Geographic Information System (GIS) information related to demographic, census, and other concerns to support such hazardous waste management program initiatives as Environmental Justice and Community-Based Environmental Protection.

- **Users want redundant data entry problems resolved to enhance data quality and save resources.** To eliminate rekeying of information, states with their own systems want to be able to supply national data (e.g., via flat files or Oracle tables) for loading into a national database. Users often have to enter the same data into more than one system. For example, EPA regional staff may be required to enter the same or related data into RCRIS/BRS and Docket databases (e.g., facility information such as location, facility name, generator status). Even within the same system, users sometimes must key enter data twice (e.g., entering corrective action orders information into two separate RCRIS modules). Users want to enter data only once and have the data read by other systems. For example, some states that have developed their own state systems want to enter data into their system and have the information "automatically" loaded into the national system (e.g., RCRIS/BRS).

- **Users understand that any system must change and continuously improve. They believe there is a need to ensure that the change management process allows all users a voice in changes and balances the need for improvements with the need to maintain stability.** Users have concerns that their needs may not be reflected in decisions to add or eliminate data elements from existing database systems. Some users have experienced such problems

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[3]See footnote number 2 on previous page.

in the past and believe that decision makers may have made different decisions if they understood more completely the consequences of the changes. Consequently, users believe that any system development effort must continue to include a change management process and that this process must be directly linked to the processes that result in change to the RCRA program (e.g., regulation development). As with any new system, all users (state, EPA regions, and EPA headquarters) should receive adequate training.

RECOMMENDATIONS

The Team endorses the direction currently being taken to build a newly revised hazardous waste management information system by migrating RCRIS and BRS from a FOCUS platform to an Oracle platform. The vision as defined by the technical architecture will allow any user that has Internet access the ability to create, manage, and use RCRA data from their desktop. The Team recommends that the ultimate new system(s) resulting from the WIN/INFORMED effort address the specific user needs outlined below :

- Providing users with desktop access
- Providing users with hot links to access other related databases
- Using point-and-click technology
- Making data available on a real-time basis
- Providing the ability to perform ad-hoc queries
- Reducing or eliminating redundant data entry
- Providing a system which keeps pace with regulatory changes as well as system improvements over time

Recognizing that the EPA ENVIROFACTS system provides selected information from all major EPA systems (e.g., BRS, RCRIS, TRI, PCS), the Team recommends that user involvement, communications, and training in ENVIROFACTS be increased. To ensure user involvement in determining access to other databases, the Team recommends that EPA establish a user group to help determine what data can be linked from ENVIROFACTS.

In migrating to a new or revised hazardous waste management information system, the Team also recommends that:

(1) Hazardous waste data users in states and EPA regions be involved in the change process from the outset and that the process adhere to change management procedures. In doing this, states and EPA will strengthen their partnership by accommodating user needs at all levels. Priorities for establishing and implementing a change management process will be based on available funding.

(2) The change management process be linked into the processes that result in program change, such as regulation development. This would better integrate data management with program implementation and ensure that the changes made within the program can be captured accurately in the data systems. As with any new system, all users should receive adequate training.

(3) EPA and states develop better communications across the programmatic user community to enable clearer understanding of how data are used. Additionally, EPA should develop better communications across the information management user community regarding proposed system changes as a result of new or changing programmatic direction.

BUSINESS PROCESS NEEDS

5. The two national offices representing the national hazardous waste management program (i.e., OSW and OECA) often have competing priorities. Neither OSW nor OECA ranked their priorities in the past. Integration and ranking of national priorities would give managers the ability to plan and implement programs more effectively.

OSW and OECA establish national program priorities that compete for resources and attention. The difficulty in meeting these goals and objectives with limited resources is compounded by unclarified ranking of priorities within and between the national program offices. Issuing separate guidances at different times exacerbates the burden of trying to address all priorities with limited resources. States and EPA regions both agree that it would be beneficial to receive one set of comprehensive, integrated, national priorities for the hazardous waste management program that holistically establish the program's direction.

The issue of resource competition for achieving the goals and objectives of the two offices is a significant one. An example of competing priorities is illustrated by considering high priority RCRA facilities (OSW) and sector priorities (OECA). States and EPA Regions may increase the issuance of formal enforcement action, such as 3008(h), 7003, 3013 orders, and 3008(a) orders, to meet OECA's Industrial Sector Initiative targets. However, many of the same EPA regional and state staff who work on issuing these orders also may work on the GPRA corrective action sites, an OSW high priority activity. An individual's work in one area draws resources away from work in the other. In a second example, OECA encouraged an increase in enforcement actions, and OSW encouraged an increase in authorization decisions for FY 1998. The EPA regional legal staff could not address both of these priorities effectively and decided to focus on one priority.

PE PAA interviewees strongly indicated the need for one set of integrated and complementary priorities with an established ranking for each priority, for the national hazardous waste management program. The national priorities should be flexible enough to accommodate EPA regional and state priorities. Interviewees also indicated a need for effective involvement of states and EPA regions in developing these priorities.

RECOMMENDATIONS

The Team identified three issues in this area. First, priorities have not been ranked within OSW or OECA (i.e., all priorities are equally important). Second, OSW and OECA national priorities compete for the same resources and attention. Third, states and EPA regions need to be involved in establishing national priorities to ensure adequate consideration of current implementation issues and the flexibility to accommodate state and EPA regional priorities.

The Team recommends that both OECA and OSW review their national priorities for the hazardous waste management program and rank these priorities in order of importance or need. EPA headquarters places equal importance on all activities in OECA's MOA and OSW's RIP/BYP. Not every activity in OECA's MOA and OSW's RIP/BYP can receive the same level of resources and attention. By ranking these activities, EPA headquarters would provide clearer direction to states and EPA regions. One way to rank activities would be to use the percent of total resources dedicated to the activities in EPA's Annual Plan.

The Team recommends that EPA headquarters better integrate OSW and OECA national priorities for the hazardous waste management program. To accomplish this, OSW and OECA's RCRA Enforcement Division (RED) could work together to identify and interpret applicable OECA hazardous waste priorities. OSW then could include this identification and interpretation of priorities into the RIP. In this way, OSW and OECA could communicate a single, integrated, and complementary set of national hazardous waste program priorities. The Team acknowledges and supports the efforts already made in this area. For example, OECA and OSW ranked their programmatic priorities for the FY 2000 operating-year priorities meeting in November 1998. Both offices continue to involve states and EPA regions in their planning and priority-setting efforts. Finally, OECA and OSW, as well as other program offices, agreed to coordinate when developing national program guidance.

The Team recommends that OSW and OECA continue to involve states and EPA regions when implementing the above recommendations and identifying future priorities. Inclusion of these organizations will strengthen the EPA/state partnership and will ensure that national priorities are effectively integrated with program implementation activities at the state and EPA regional levels

6. **OSW and OECA national guidance documents for the hazardous waste management program have been issued at different times during the federal fiscal year. States and EPA regions need these guidance documents to be issued concurrently and made available in a more timely fashion. This would allow sufficient opportunity for hazardous waste managers to incorporate national priorities into state and EPA region specific plans.**

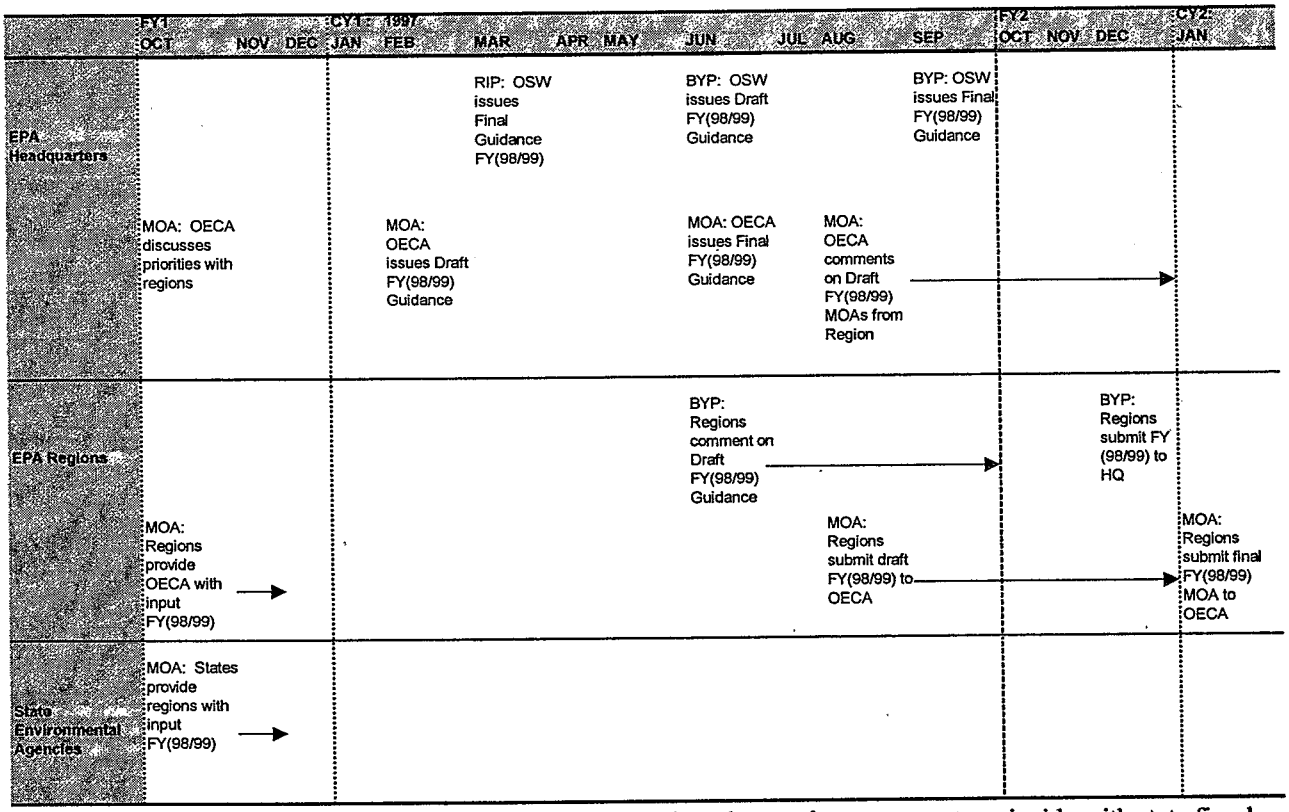
OSW and OECA have not issued guidance documents for the hazardous waste management program concurrently and with enough lead time to give states and EPA regions the opportunity to effectively incorporate national priorities into state and EPA regional plans and agreements. As a result, some states and EPA regions must revisit plans and negotiated agreements to address newly received guidance and related priorities. This "revisiting" consumes valuable time and resources. Interviewees stated that guidance materials should be issued earlier, distributed to a wider audience, and made available more rapidly because timing issues have a negative impact on state and EPA regional negotiations and planning efforts.

To better understand the guidance timing issue, the Team analyzed the 1998/1999 schedules of the OSW RIP and BYP and the OECA MOA. The OSW draft RIP and OSW RIP Final Guidance (as part of OSWER's final consolidated guidance) were issued in January and March of 1997, the OECA MOA Draft and Final Guidance were issued in February and June of 1997, respectively, and the OSW BYP Draft and Final Guidance were issued in June and September of 1997, respectively, as shown in Figure 10. Although state fiscal years, which in many cases vary from the federal fiscal year and with other state fiscal years, affect the timing of grant negotiations with EPA regions, most interviewees agreed that relevant draft guidance documents should be distributed by February and finalized and distributed by April. Because some states and EPA regions have agreed to operate on state fiscal years for PPAs, issuance of final guidance by April will not accommodate all state and EPA region planning needs but will improve the negotiations and planning efforts of some states and EPA regions. It should be noted OECA and OSWER guidances for FY 2000/2001 are scheduled to be issued by April 1.

To determine if states and EPA regions generally could rely on draft guidance documents for developing state and EPA regional plans, the Team compared the draft and final OSW RIP and BYP and the OECA MOA. For fiscal year 1998/99, there were no substantive changes in the RIP or BYP draft and final documents. For fiscal year 1998/99, as compared to the draft, the final OECA MOA added a significant sector (i.e., coal fired power plants), which required some states and EPA regions to revise plans and/or renegotiate grant activities. Because of substantive revisions from draft to final documents, states and EPA regions are often reluctant to rely on draft documents.

Additionally, PE PAA interviewees believe that guidance documents for the hazardous waste management program should be distributed more widely to allow for a more comprehensive set of comments on draft guidance and input on submission documents. For example, states and EPA regions would like the OECA MOA distributed to regional program personnel in addition to regional enforcement and compliance assurance personnel. States and EPA regions also stated they would like to be notified when new guidance documents or updates are issued and distributed. Once finalized, OSW and OECA should make all final guidance documents electronically available in a timely fashion in one easily accessible location (see footnote 1 on page 25). While it is the responsibility of regional enforcement and compliance assurance personnel to appropriately distribute OECA guidance within the EPA region (e.g., to regional program staff), providing electronic access to draft and final guidance materials at a national level will ensure that guidance is reaching all who need it within states, EPA regions, and EPA headquarters.

Figure 10. Timeline of the OSW RIP and BYP and OECA MOA*



* State fiscal years vary. Some states and EPA regions develop plans and agreements to coincide with state fiscal years.

Finally, states and EPA regions want to review and comment on-line on draft guidance documents for the hazardous waste management program. Such a capability will increase the efficiency of both the guidance development and distribution process. Interviewees, predominantly at EPA headquarters, want the ability to provide electronic access to specific individuals or user groups. This would include the capability to electronically transmit or provide electronic access for notices of new guidance revisions or other related information.

Figure 11. System Requirements Related to the Distribution of Guidance

- Ability to electronically transmit draft and final guidance materials for the hazardous waste management program, notifications of updates, and other "tickler" information (e.g., review dates) to specific users for easier, more rapid reviews and approval (this could include electronic signature for approval)
- Ability to make guidance materials available electronically to all stakeholders

RECOMMENDATIONS

The Team recommends that OSW and OECA align the schedules for development and distribution of the OSW RIP and BYP and the OECA MOA. In accordance with current EPA policy that requires offices to issue all guidance by April 1, the Team recommends that final hazardous waste management guidances be distributed by April 1 of the preceding federal fiscal year to give states and EPA regions the opportunity to better develop plans and agreements (e.g., grant workplans, PPAs) that address cross-program issues and to allow more rational tradeoffs between programs. Distribution of both documents by April 1 would serve to promote a holistic approach to regional and state planning efforts. The Team agrees with and supports the recommendation from the FY 2000 operating year priorities meeting that supports issuance of draft guidance by February and final guidance by April.

To address the distribution and access needs expressed by PE PAA interviewees, the Team recommends that draft and final versions of the MOA, RIP, and BYP (1) be sent more rapidly and to a wider audience of users through an electronic notification system and (2) be posted in an automated system to provide users with central access to the most current guidance. Both of these recommendations would result in a more efficient process for commenting on draft guidances, allow easier and greater access to guidance, and provide OSW and OECA with the ability to distribute draft and final guidance to targeted reviewers (i.e., select reviewers from a list of system users and distribute to and receive comments and approvals from these reviewers).

As discussed earlier in this report, the Team identified and examined Partnership 2000, an automated system designed to counter the paperwork-intensive grant administration process. The Partnership 2000 system also offers functional capabilities that appear to meet user requirements related to distributing and posting guidance, as discussed above. Partnership 2000 allows users to post, search, and retrieve EPA and state guidance materials using a Lotus Notes platform *or* an Internet-Web Browser. The system provides an electronic vehicle for communication, review, and transmittal of documents, with the additional capability of allowing organizations to target specific users to receive, review, and approve documents (including electronic signature capabilities). In addition, the system allows Internet access to guidance materials published and posted by any participating organization. The Team recommends that Partnership 2000 be considered as a candidate for addressing the guidance timeliness and accessability needs.

7. **States and EPA deal with redundant planning requirements as part of managing the hazardous waste program. Program staff often do not know how a particular plan is used and sometimes fail to recognize the value of the plan itself. To be efficient and effective, planning for the hazardous waste management program should be streamlined. Plans that are developed always should be used.**

During PE PAA interview sessions, the Team found the theme of burdensome planning requirements to be universal. Within the hazardous waste management program, the process of developing similar program and implementation plans is perceived to be time consuming, resource intensive, and unproductive. While interviewees did see a need for establishing a strategic vision for the hazardous waste management program (i.e., long-term planning) and planning for annual implementation activities (i.e., short-term planning), they believe that the current planning architecture for managing the hazardous waste program should be streamlined.

The Team found a large number of hazardous waste management plans, many with overlapping purposes and contents. The various plans may be required by statute or regulation (e.g., GPRA, grant workplans), by another unit within an organization (e.g., OECA's MOA, OSW's BYP), or by internal policy (e.g., Division Operating Plans, Branch Operating Plans). Figure 12 lists the types of hazardous waste management guidance and plans currently developed by hazardous waste program managers at the state, EPA regional, and national levels.

Figure 12. Hazardous Waste Management Plans

Name	Purpose	Frequency	Organization Requiring Plan or Input	Organization Responsible for Writing Plan
Strategic Plans	A state, regional, or headquarters plan that provides a high-level description to provide general direction, priorities, and goals for a particular program over a multi-year period.	Varies	EPA HQ, EPA regions, and states	EPA HQ, EPA regions, and states
RCRA Implementation Plan (RIP)	A guidance developed by OSW for distribution to EPA regions and states specifying priority areas of the hazardous and solid waste management programs for a 2-year period.	Biannual	EPA OSW	EPA OSW
Multi-year Permitting and Corrective Action Plan	A state-developed plan describing the permitting and corrective action implementation activities at facilities for a 3-to-5 year period.	Varies	EPA regions	EPA regions and states
Enforcement MOA Guidance	A template developed by OECA for distribution to EPA regions to capture and identify specific projections and issues related to the enforcement and compliance assurance program, including the hazardous waste management program for a 2-year period.	Biannual (updates during the off years)	EPA OECA	EPA OECA
Enforcement MOA Submission (state response)	The state response indicating the state plan related to implementing the enforcement and compliance assurance program.	Annual	EPA regions	States
Enforcement MOA Submission (EPA regional response)	The EPA regional response to the Enforcement MOA Guidance indicating the regional projections related to implementing the enforcement and compliance assurance program, including the hazardous waste management program, for a 2-year period.	Annual	EPA OECA	EPA regions
Operating Plans	Plans that describe the waste management implementation activities of an organization for a specified period of time.	Varies	EPA OSW, EPA regions, and states	EPA OSW, EPA regions, and states

Figure 12. Hazardous Waste Management Plans

Name	Purpose	Frequency	Organization Requiring Plan or Input	Organization Responsible for Writing Plan
Performance Partnership Grant (PPG) Workplan	Plan indicating state projections and activities to be accomplished with financial support during the cooperative agreement period.	Varies	EPA regions, states	States
GPRA Annual Performance Plan	A plan developed by EPA that specifies goals, objectives, subobjectives, targets, and resources for all EPA programs, including the waste management programs.	Annual	Congress	EPA HQ
Overarching MOA (OMOA)	A plan developed by and EPA region(s) in conjunction with EPA headquarters that delineates the priorities of greatest importance across all media, including waste management, for a particular fiscal year.	Annual	EPA HQ, EPA regions	EPA HQ, EPA regions
Performance Partnership Agreements (PPA)	A high-level plan developed by a region(s) and state(s) that outlines the agreement between the two organizations for implementing media and other critical programs, including the waste management program.	Annual	EPA regions, states	EPA regions, states
Beginning of Year Plan (BYP) Guidance	A template developed by OSW for distribution to EPA regions to capture and identify specific projections and issues related to the waste management program for a particular fiscal year.	Annual	EPA OSW	EPA OSW
Beginning of Year Plan (BYP) Submission	The regional response to the BYP Guidance indicating the regional projections related to implementing the waste management program for a particular fiscal year.	Annual	EPA OSW	EPA regions, states
Cooperative Agreement Workplan	Plan indicating state projections and activities to be accomplished with financial support during the cooperative agreement period.	Annual	EPA OSW	States
Internal State Plans	Varies	Varies	State	State

Because many of the plans listed in Figure 12 have similar purposes and components, efforts may be placed on revising a particular plan to meet the formatting requirements of another, while the substance remains unchanged. For example, some EPA regions develop BYP submissions and then reformat these submissions into organizational operating plans. Often, there is little recognized value associated with developing these reformatted plans. The varied timing of the plans adds to the developers' burden. Figure 13 depicts the complexity of the relationships, overlaps, and redundancies of these plans. Although Figure 13 depicts hazardous waste management plans for states, EPA regions, and EPA headquarters, not all organizations develop each type of plan (e.g., not all states have PPAs).

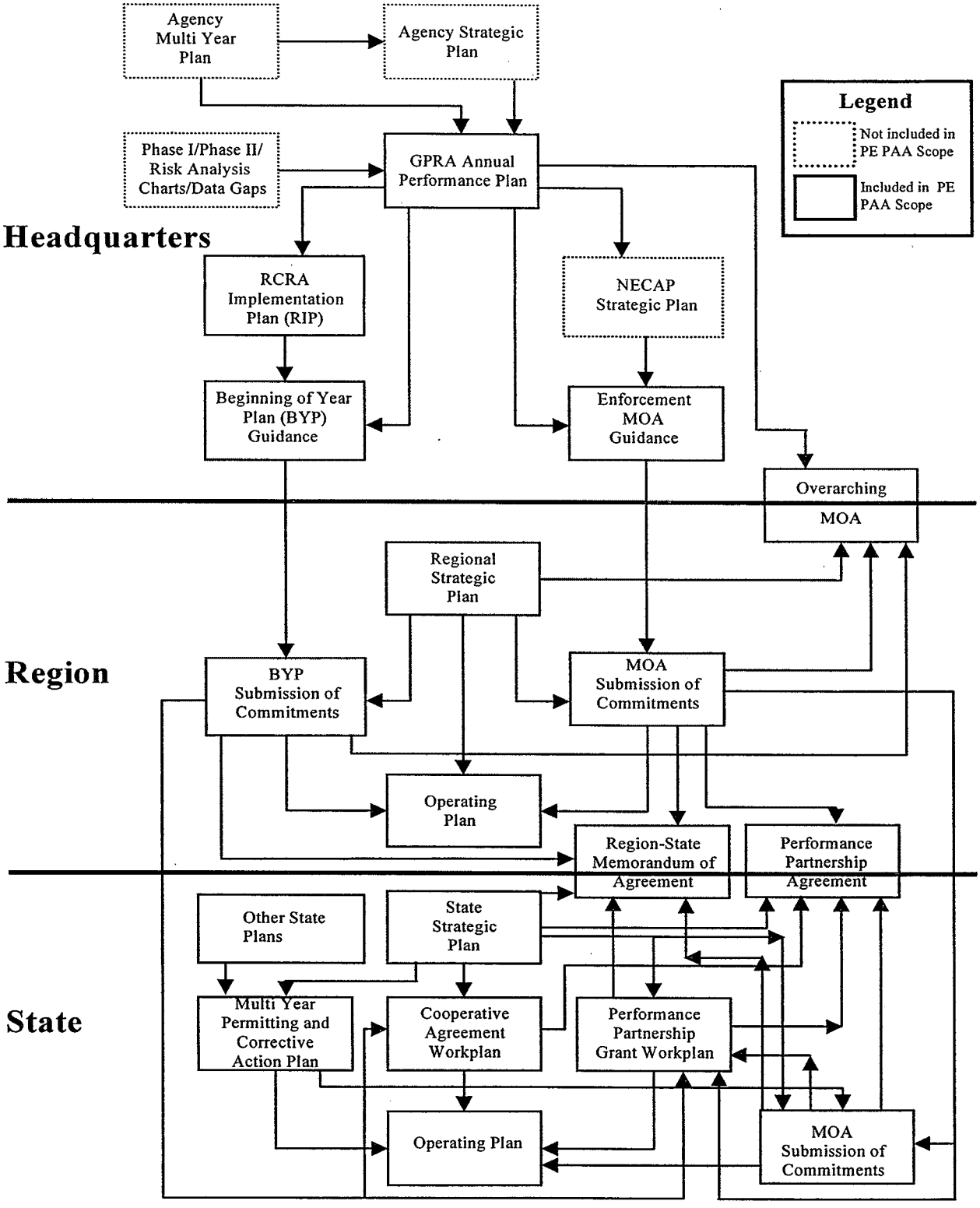
Finally, interviewees were not sure how some plans were used. For example, some plans are developed and submitted to the requesting organization (internal or external) but are never reviewed or tracked. Plans in subsequent years may or may not have a linkage to plans of the previous years. This perceived lack of use resulted in the interviewees believing the plans had little or no value.

RECOMMENDATIONS

The Team identified three issues in this area. First, internal plans required by an organization may be redundant. Second, plans required by regulation, statute, and/or other organizations may add to this redundancy, increase burden, and take valuable time away from implementation activities. Third, program staff at all levels are not convinced of the value of the various planning mechanisms and do not see plans being used. The Team's recommendations addressing these issues follow.

The Team recommends that each organization (states, EPA regions, and EPA headquarters program offices) streamline their own planning process for hazardous waste management. This could be accomplished by reviewing the types, timing, purpose, components, contents, and uses of the plans required internally. Where similarities exist between internal plans, each organization should consider eliminating or combining the plans. Each organization should review external planning requirements to see whether there is an opportunity to link internal needs and plans with external requirements.

Figure 13. Relationship of National, Regional, and State Hazardous Waste Management Plans



The Team also recommends that each organization requiring another organization to submit a plan review their planning requirements to determine whether the requirements could be streamlined. Again, reviewing the types, timing, purpose, components, contents, and uses of the currently required plans could result in the identification of similarities and provide opportunities for eliminating or combining plans. Organizations also should consider alternative approaches to getting the same agreements, information, or results. For example, two EPA regions participated in a pilot project to integrate EPA headquarters and EPA regional priorities. During the project, the EPA regional and headquarters staff met, discussed, drafted, and redrafted materials, resulting in lengthy, narrative Overarching Memoranda of Agreements (OMOAs). After reviewing the process and results, EPA decided to conduct one high-level meeting with no written requirement for OMOAs. Another possibility for achieving the desired result is to use the tracking system discussed in Finding 2 of this chapter, especially if the plan is used to identify a universe, set targets, and track progress in meeting those targets (e.g., BYP).

Relating to the hazardous waste management program, the Team specifically recommends reviewing the needs and uses of OSW's BYP and OECA's MOA. EPA regions submitted their FY 1999 BYPs in December 1998. EPA headquarters submitted the GPRA Annual Plan for FY 2000 in September 1998. Although the BYPs are multi-year, they are not useful in developing subsequent GPRA annual plans, because the outyear projections are combined to cover more than one year. EPA regions are unclear about the relationship between the BYP projections and the projections of the GPRA Annual Plan. Similar concerns were raised with OECA's MOA. Although states do not develop these documents, they do provide EPA regions with input and share the concerns.

Finally, where plans are not used, the Team recommends eliminating them. Where plans serve a useful purpose, each organization should clearly state the purpose of the plan, identify where and how it is being/will be used, and communicate that to program staff, especially the developers of the plan.

CHAPTER 4

STABILITY ANALYSIS

The Team examined factors that may impact or require changes to either the data or processes within the PE PAA scope, including pending legislation, Agency initiatives, system development efforts within and outside EPA, new and/or evolving program requirements, and variances in workflows and data needs across multiple stakeholders involved in the hazardous waste management program.

FACTORS THAT IMPACT ACROSS THE PE PROGRAM AREA

The stability of data and activities in the PE PAA will be influenced by how other PAA teams identify, define, and model information related to the implementation of the hazardous waste management program. All PAA efforts will investigate the processes and information needs within their individual scope (e.g., UID will be concerned with data, activities, and system needs associated with identifying hazardous waste handlers). Most of the data and processes within the PE PAA scope (i.e., related to grants, plans, and evaluations) rely on information created by activities generated and included in other PAAs. Because of this connection between PE PAA and implementation PAAs, a potential exists for change to the data elements recommended by the Team (see Appendix A). The PE PAA Team suggests that subsequent PAA teams consider how their recommended data elements affect those of the PE PAA Team. Where data elements are needed for program implementation activities, future PAA teams need to ensure, to the extent possible, that the new data elements also meet the needs of program evaluation activities. Future PAA Teams who recommend revising the data elements in Appendix A should work with the CC to ensure that the revised data elements continue to meet the information needs identified by the PE PAA Team.

Because the responsibilities of the PE PAA Team conclude with the submission of this report, the WIN/INFORMED ESC, the CC, and Project Coordinators (Coordinators) are responsible for (1) ensuring that subsequent PAA teams consider the potential effects of their recommendations on PE PAA recommendations and (2) coordinating with subsequent PAA teams to ensure user requirements related to plans, grants, and evaluations are considered during future analyses. Additionally, while each PAA team is responsible for tracking initiatives that may impact their program area, the CC and the Coordinators are responsible for tracking the impact of the overarching initiatives across the entire WIN/INFORMED effort. These initiatives include: Reinventing Environmental Information, Burden Reduction, One Stop, Facility ID, and the

renegotiation of core performance measures under NEPPS. Because of the evolving nature of initiatives, it is difficult to predict definitively the future relationships between some of these existing initiatives, as well as emerging ones, and WIN/INFORMED. However, by tracking these activities, and in turn defining that relationship, WIN/INFORMED will be able to better clarify its data needs in ways that will leverage the successes of other projects.

FACTORS THAT IMPACT THE PLANNING-EVALUATION CYCLE

The Office of the Chief Financial Officer (OCFO) is developing an Agency-wide accountability system to track and report on performance and resource information as required by GPRA and Agency managers. As of this writing, the system was not developed to determine with any degree of accuracy what effects the accountability system requirements would have on the PE PAA recommendations. The CC or the Coordinators will track the development of OCFO's accountability systems to ensure that automated systems developed as a result of the Team's recommendations will be able to link with EPA's new accountability system.

In developing performance measures to be used under GPRA, PPAs, and other initiatives, states, EPA regions, and EPA headquarters are moving away from measuring activities and toward measuring environmental results. The automated systems recommended to capture these measures need to be designed with the flexibility to accommodate this change.

GPRA requirements and, subsequently, EPA interpretation and implementation of these requirements are new and evolving. As such, the data and activities related to GPRA may change. To accommodate potential changes in GPRA data requirements, the Team recommends a flexible framework for the automated systems the Team is proposing. This flexibility will increase the likelihood that future GPRA data requirements can be addressed without having to significantly modify an automated system.

EPA evaluations of state programs are evolving. The NEPPS partnership between states and EPA regions has led regions to move toward more targeted performance evaluations. The proposed structure of the automated systems will accommodate a full range of performance and evaluation procedures. The approach recommended here would allow for quantitative and qualitative tracking of mutually agreed upon evaluation areas and measures.

FACTORS THAT IMPACT THE GRANT CYCLE

Applicants developing workplans for PPGs, as well as 3011 and 8001 Cooperative Agreements, use many different processes. Depending on the applicant, the grant type, and the corresponding workplan, commitments may include specific targets (e.g., numbers of activities) or may include only narrative descriptions of activities to be performed. The Team attempted to identify and

define data elements and related activities in a manner that would accommodate these differences, offering flexibility to all stakeholders in meeting grant information needs. The automated system capturing the workplan may not meet the specific needs of a state but remains general enough to meet the minimal needs of all states. However, the proposed system should be designed to allow states to adapt the information tracked in the system, so their needs can be met.

State development of PPGs is a new and evolving process, making the data and activities identified inherently unstable. As the PPG process becomes better defined (i.e., established business rules and clearly identifiable information needs), the data and activities should be revisited and revised as necessary.

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CHAPTER 5

FUTURE DIRECTIONS

This chapter presents the roles of the Team, the Coordinators, the CC, the ESC, and the Design Team upon completion of the PE PAA and PE Final Report. It also presents the Team's suggested high-level approach for implementing recommendations that the ESC accepts.

ROLES

1. Team

The Team's efforts end when this report is presented to the ESC (scheduled for March 1999). It is expected that a state, EPA regional, and EPA headquarters Team member will participate in the Design Team formed to implement accepted system recommendations. It is likely that one or more Team members may participate or lead efforts to implement accepted recommendations for process improvement.

Currently, one state and one EPA regional member of the Team are members of the UID and Waste Activity Monitoring (WAM) PAA Team (UID began in October 1998 and as of this writing WAM is starting up). The Team believes this participation will be one of the necessary links to ensure the PE PAA results and potential impacts are considered during the UID and WAM analyses.

2. Project Coordinators

The Coordinators are responsible for briefing subsequent PAA Teams on the PE PAA findings and recommendations, particularly those supported by the ESC. In their briefings, the Coordinators will include the specific data elements recommended for grants, plans, and evaluations. The Coordinators also will track the potential impacts of outside activities on the PE recommendations, as discussed in Chapter 4.

3. Coordinating Committee

The CC is responsible for providing overall coordination among and between the PAA Teams and ensuring that other PAAs consider the needs of the PE area. The CC will make necessary changes to the overall project plan, schedule, and resources to accommodate implementation of the accepted PE recommendations.

4. Executive Steering Committee

The ESC will evaluate the PE recommendations and decide which, if any, to implement. The ESC will need to commit resources and provide continued leadership for promoting the accepted recommendations. The ESC will identify the appropriate organizations to implement an accepted recommendation.

5. Design Team

The ESC will task the Design Team with the accepted system recommendations. The Design Team is responsible for implementing the system recommendations.

RECOMMENDED IMPLEMENTATION APPROACH

1. Establish Implementation Team

The Team recommends that the ESC or CC establish an implementation team for each of the accepted recommendations. Where the related recommendations could be combined into one effort, the ESC or CC may want to task the team with implementing more than one recommendation. For example, all three process improvement recommendations could be combined. The implementation team could be a team specifically formed to address the recommendation(s) or could be an established team of experts. The implementation team may include representatives from states, EPA regions, and EPA headquarters.

2. Identify Champion

The Team recommends that the ESC identify a "champion" for the implementation of each accepted recommendation. The champion's responsibilities would include (1) coaching the implementation team as needed, (2) providing requested information, (3) ensuring team member participation (especially for multi-organizational teams), (4) ensuring adequate resources, and (5) promoting the implementation of the assigned recommendation(s). To accomplish these responsibilities, the Team believes that the champion should be a member of the CC, an Associate Division Director, or a Division Director.

SCHEDULE

As outlined in the *WIN/INFORMED Project Plan*, PE system design is not scheduled to begin until winter 2002. The CC agreed that the remaining PAAs should be conducted before design begins on PE recommended systems, because the PE area uses data captured by other programs. Resource constraints also may affect this schedule.

Because PE system design is not scheduled to begin until winter 2002, the PE Team believes timely implementation of accepted process improvement recommendations would demonstrate progress and useful results. The Team suggests that implementation projects for process improvements be initiated shortly after acceptance by the ESC and be designed to be completed within six to twelve months of the start date. In the short-term, the Team believes the Design Team should investigate the Partnership 2000 system further to determine if it meets specified user needs.

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APPENDIX A.

RECOMMENDED DATA ELEMENT LIST

LEGEND

Name: The English title or phrase used to identify the data element.

Definition: An explanation of the meaning of the data element.

Source: The origin information for the data element (e.g., current systems such as RCRIS, BRS). These data elements are recommended by the PE PAA Team and should not be deleted by other WIN/INFORMED PAA efforts without consulting the CC. No data elements from RCRIS or BRS are being deleted as a result of this analysis effort. As noted elsewhere in this report, ongoing efforts/initiatives may impact this list of data elements. In addition, the data elements listed below may be revised through the RCRIS/BRS change management process.

Code: Alpha-numeric system identifier for a data element.

History: The type of record that must be maintained for the data element.
Current history indicates that only the most recent occurrence of a particular data element be maintained by the information system.
Basic history indicates that a chronology or tracing of multiple occurrences of the same data element be maintained and retrievable by the information system. Basic history allow users to retrieve and view or report on trends or changes for a specific data element.

Owner: The organization responsible for ensuring data quality of the data element. Implementing organization is the region or authorized state implementing the program.

NOTE:

(1) This list of recommended data elements only includes the information the PE PAA Team believes is necessary to meet the planning and accomplishment needs discussed in the main body of this report. Other related information such as "permittee name" or "facility identification number" falls outside the scope of the PE PAA. Other PAA teams should consider the implications of this when conducting their analyses. Chapter 4 (Stablility Analysis) provides a detailed discussion on future PAAs and the information needs they will address. State and EPA acceptance of the data elements listed in Appendix A denotes agreement that these data elements are a starting point for the minimum requirements of the hazardous waste program and will be included in a national information system, although they may be revised by subsequent PAAs.

(2) Data elements related to GPRA corrective action and permitting baselines are "flags" or "tagged" (e.g., a file of specific RCRIS facility ID numbers) facilities that comprise the baseline. As GPRA data elements are still evolving, however, other WIN/INFORMED analysis efforts may revise the GPRA related data elements listed here.

PART A-1: RECOMMENDED DATA ELEMENTS CURRENTLY COLLECTED IN RCRIS/BRS THAT ARE MANDATORY CORE/NATIONAL DATA*

*(MANDATORY CORE/NATIONAL DATA refers to data that must be entered into and tracked in the national RCRA data system(s) (RCRIS/BRS/RCRAInfo) by all implementing Regions and States each and every time the activity occurs, and following the nationally agreed upon definitions to ensure consistency.)

Name	Definition	Source	Code	History	Owner
RCRIS DATA					
CORRECTIVE ACTION EVENTS					
GPRA corrective action baseline universe	1997 GPRA corrective action baseline universe. This universe captures a specific set of facilities by ID number which were identified as high priority corrective action candidates in the baseline year of 1997. This is a "snapshot" universe, frozen in time.	RCRIS	This universe of specific facilities is captured by a file of ID #s maintained by HQ.	Current	PSPD
RCRA Facility Assessment (RFA) Completed	The date by which the RFA is completed.	RCRIS	CA050	Basic	Implementing organization
Notice of Contamination	Receipt by the Agency of written notification that contamination has been discovered at the RCRA facility and that the RCRA facility has notified all persons potentially impacted by the release of hazardous constituents.	RCRIS	CA060	Basic	Implementing organization
Determination of Need for RCRA Facility Investigation (RFI)	This event indicates whether an RFI or further investigations is necessary to analyze the extent of contamination at this facility. An RFI is usually necessary when, after the initial assessment, there is evidence of, or the likelihood of, a contamination release which poses a current or potential threat to human health and/or the environment. The event can be completed after the initial assessment. Status Codes: YE: RFI is necessary; should be entered when further investigation is needed. NO: RFI is not necessary; should be entered when further investigation is not needed. "NO" indicates that an RFI will not be needed at this site because remediation is not necessary.	RCRIS	CA070	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Corrective Action (CA) Prioritization	This event indicates that a facility (or area) has been prioritized using the National Corrective Action Prioritization System (NCAPS) or an equivalent system which has been approved by EPA Headquarters. A status code for the priority of the facility or area should be entered at the same time as the prioritization complete date. High, Medium, and Low determinations should be based on current national guidance. Status Codes: HI: Facility (or area) was assigned a high corrective action priority. ME: Facility (or area) was assigned a medium corrective action priority. LO: Facility (or area) was assigned a low corrective action priority.	RCRIS	CA075	Basic	Implementing organization
RFI Imposition	The event by which the State or EPA formally imposes an obligation upon the owner/operator of a facility regulated by RCRA, or the equivalent state law, to conduct an RFI at its facility.	RCRIS	CA100	Basic	Implementing organization
RFI Workplan Approved	The event by which the State or EPA approves the RFI workplan submitted by the RCRA facility.	RCRIS	CA150	Basic	Implementing organization
RFI Report Approved	The event by which the State or EPA accepts the findings and recommendations of the RFI report submitted by the RCRA facility. No entry should be made under this code until the RFI enables a formal agency decision to continue with CMS or terminate the corrective action process.	RCRIS	CA200	Basic	Implementing organization
Referred to a Non-RCRA Authority	The facility (or area) has been referred to CERCLA or some other Federal Non-RCRA authority. As a matter of program policy, once a facility is referred to CERCLA or other non-RCRA Federal authority, progress of the facility would not be actively tracked by RCRA and the facility would not be expected to "return" to RCRA, barring some unforeseen event. Status Codes: SF: Corrective Action at the facility or area referred to CERCLA. OT: Corrective Action referred to another non-RCRA Federal Authority.	RCRIS	CA210	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Stabilization Measures Evaluation	This event indicates that the feasibility and appropriateness of stabilization activities at this facility have been evaluated. This evaluation should be completed using the National Corrective Action Stabilization Questionnaire or a similar type of evaluation which asks the same range of questions. A status code should be entered for the areas covered by each evaluation. The status codes are consistent with the possible outcomes from the National Corrective Action Stabilization Questionnaire. Status Codes: YE: This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations. NF: This facility is not amenable to stabilization activity at the present time, because it appears to be technically infeasible or inappropriate. IN: This facility is not amenable to stabilization activity because of a lack of technical data. An evaluation had been completed, but further data is necessary to determine stabilization measures, feasibility or appropriateness. This status should be changed when data becomes available. NR: This facility is not amenable to stabilization activity at the present time for reasons other than: (1) it appears to be technically feasible or inappropriate (NF); or (2) there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.	RCRIS	CA225	Basic	Implementing organization
CMS Imposed	The event by which the State or EPA formally imposes the obligation upon a RCRA facility to perform a Corrective Measures Study (CMS).	RCRIS	CA250	Basic	Implementing organization
CMS Workplan Approved	The event by which the State or EPA formally approves the CMS plan submitted by the RCRA facility. No entry should be made under this code until the Agency intends for the RCRA facility to begin conducting the CMS.	RCRIS	CA300	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
CMS Approved	The event by which the State or EPA approves the final CMS report submitted by the RCRA facility. No entry should be made under this code until sufficient data, information, has been provided to the Agency so that a decision to continue or terminate the corrective action process can be made.	RCRIS	CA350	Basic	Implementing organization
Decision on Petition for No Further Action	The event by which the State or EPA formally approves the petition by the RCRA facility for no further action.	RCRIS	CA375	Basic	Implementing organization
Date for Public Notice on Proposed Remedy	The event by which the State or EPA sends public notice that a proposed remedy has been tentatively selected for a RCRA facility. The public notice should specify where the documents upon which the Agency made its decision are located and when they are available for public review.	RCRIS	CA380	Basic	Implementing organization
Date for Remedy Selection (CM Imposed)	The event by which the State or EPA formally notifies the RCRA facility to initiate the corrective measure that has been proposed in the notification process and is hereby incorporated into the RCRA facility's permit or order.	RCRIS	CA400	Basic	Implementing organization
Corrective Measures Design Approved	The event by which the State or EPA formally notifies the RCRA facility that the design of the corrective measure is acceptable.	RCRIS	CA450	Basic	Implementing organization
CMI Workplan Approved	The event by which the State or EPA approves the Corrective Measure Implementation Program Plan, Construction Plans and Specification, Design Reports, Cost Estimates, Project Schedule, Operation and Maintenance Plan, Study Reports, Construction Quality Assurance Program Plan/Documentation and the Corrective Measure Implementation Report incorporating comments received on draft submissions.	RCRIS	CA500	Basic	Implementing organization
Determination of Tech Impracticability	The event by which the State or EPA formally notifies the RCRA facility that the selected remedy cannot be accomplished because it is technically impracticable.	RCRIS	CA510	Basic	Implementing organization
Certification of Remedy Completion (CMI)	The event by which the State or EPA formally notifies the RCRA facility that it accepts its certification that the remedy specifications in the permit or order have been met, and that the specified remedy or remedies has been completed, and/or operation and maintenance requirements only remain in order to maintain this level of performance.	RCRIS	CA550	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Stabilization Measures Implemented	EPA's or the State's notification or written acknowledgment to the RCRA facility that a stabilization activity or activities are required or otherwise being undertaken. The notification mechanism could be an Enforcement order, order modification, permit, or permit modification, or similar enforceable state instrument requiring the facility to undertake stabilization activity; it may also take the form of a written acknowledgment from EPA or the State that stabilization activity is being undertaken. The notification or acknowledgment must contain written stabilization objectives, goals, performance standards, or desired results. The stabilization activity must control or abate threats to human health and/or the environment from releases, and/or prevent or minimize the further spread of contamination.	RCRIS	CA600	Basic	Implementing organization
Stabilization Construction Completed	The event by which the State or EPA formally notifies the RCRA facility that the interim measures undertaken have been completed to the satisfaction of the Agency; and/or the event by which the State or EPA formally notifies the RCRA facility that stabilization objectives have been met, but require continued operation and maintenance to maintain this level of performance. Multiple occurrences of this event may be entered and tracked in an information system.	RCRIS	CA650	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Human Exposures Controlled Determination (GPRA)* **(FY99: Changing to CURRENT HUMAN EXPOSURES UNDER CONTROL)*	This event indicates there are no current unacceptable risks to humans due to releases of contaminants at or from the facility that are subject to RCRA Corrective Action. This facility wide measure is based on current conditions at the facility, and covers all types of releases and media. Human exposure controls or other corrective action must have been implemented in every case where a release has posed a current unacceptable risk to human health before this event can be entered. (Environmental indicators are not a measure of activity at the facility, but a measure of the environmental status of the facility) The event may be counted when one or more of the following are met: 1. Remedial measures have been implemented with the result that all maximum contaminant concentrations detected or reasonably suspected are less than or equal to their respective action levels (e.g., MCLs for groundwater, a 10-6 risk level for other contaminants, or any other number designated as the action level) or do not exceed an Agency specified cleanup standard for the facility. OR 2. There is no unacceptable human exposure to any contaminant concentration above action levels that has been detected or is reasonably suspected based on current contaminant concentrations and current site conditions. Although contamination remains at the facility that may require further Remediation, action has been taken or site conditions are otherwise such that unacceptable threats to human health from actual exposure to the contamination are not plausible based on current uses of the sites. Such actions may include the use of physical barriers or institutional controls (e.g., deed restrictions or alternative water supply). <u>Status Codes</u>: YE: Yes, applicable as of this date. NA: Previous determination no longer applicable as of this date. NC: No control measures necessary. NO: Facility does not meet definition. IN: More information needed. <u>NOTE:</u> *During FY99, this event code is undergoing revision both in definition and in allowable status codes. Refer to RCRIS DED.*	RCRIS	CA725	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Release to GW Controlled Determination (GPRA)* **(FY99: Changing to MIGRATION OF CONTAMINATED GROUNDWATER UNDER CONTROL)*	This event indicates that groundwater releases subject to RCRA Corrective Action at the facility are controlled. This event may be counted when one or more of the following conditions are fulfilled and documented by field measurements and/or observations including the direction of groundwater flow gradients over time. For all known or reasonably suspected groundwater contamination at the facility in excess of action levels, or in excess of an Agency specified clean-up level: 1. An engineered system has been installed that is designed and operating (including performance monitoring) to effectively control the further migration beyond a designated boundary such as the engineered system, the facility boundary, a line up gradient of receptors, or the leading edge of the plume as defined by levels above the Agency established action levels or clean-up standards. OR 2. The Agency has determined that the groundwater clean-up objectives can be met without the use of an engineered system through the remedial measures selected, including facilities where the contamination will naturally attenuate. <u>Status Codes:</u> YE: Yes, applicable as of this date. NA: Previous determination no longer applicable as of this date. NR: No release to groundwater. NO: Facility does not meet definition. IN: More information needed. <u>NOTE:</u> *During FY99, this event code is undergoing revision both in definition and in allowable status codes. Refer to DED.*	RCRIS	CA750	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
CA Process is Terminated	This event indicates the completion of the corrective action process; that active remedial measures, as specified in the RCRA permit or enforcement order, are completed for the entire facility or for areas at the facility. This event should be entered 1) after the Certification of Remedy Completion or Construction Completion (CMI Completed) (CA 550), and/or 2) after a stabilization measure(s) has been completed in a manner that meets the stabilization objectives, goals, performance standards, and/or desired results (CA650), and terminating corrective action at this point at the facility or area would satisfy all permit or order requirements for CA. Status Codes: NF: No Further Action. RM: Remedial Activities Completed.	RCRIS	CA999	Basic	Implementing organization
	CLOSURE EVENTS				
Plan Received - Closure	Date closure plan is received by region or state.	RCRIS	CL310	Basic	Implementing organization
Plan Approved - Closure	Date, following required public notice, that final approval is granted by region or state. Status Codes: ME: Final Closure (all units at facility are closing). MO: Partial Closure (only one or some of the units at the facility are closing; others remain in operation).	RCRIS	CL360	Basic	Implementing organization
Receive Closure Certification	Date owner/operator and independent registered engineers' certification is received by region or state verifying that the approved closure plan was implemented as specified. Status Codes: NO: Not according to plan YE: According to plan	RCRIS	CL370	Basic	Implementing organization
Closure Verification	Date region or state approves/accepts or rejects the closure certification and notifies the facility in writing,,also releasing facility from financial responsibility requirements to maintain closure cost assurances. Status Codes: CA: Clean closure, acceptable. CU: Clean closure, unacceptable. DA: Closure with waste in place, acceptable. DU: Closure with waste in place, unacceptable.	RCRIS	CL380	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
INTERIM STATUS, BIF and OPERATING PERMIT EVENTS					
GPRA hazardous waste controls / permits baseline universe	1997 GPRA hazardous waste facility baseline universe. This universe captures a specific set of facilities by ID number which were identified as being in the Permitting Workload universe (i.e., needing a permit) in the baseline year of 1997. This is a "snapshot" universe, frozen in time.	RCRIS	This universe of specific facilities is captured by a file of ID #s maintained by HQ.	Current	PSPD
Part A Submitted	Date Part A form received by EPA region or authorized state. Status Codes IS: Initial Submittal CS: Request for Change under Interim Status PB: Submitted with a Part B or Mod Request	RCRIS	OP001	Basic	Implementing organization
Part A Determination	Date of EPA regional or state authorized action, such as date of letter to facility acknowledging receipt of Part A application. Status Codes: AK: Acknowledgment of Part A Receipt VE: Verified by Inspection to Exist AP: Approval of Interim Status Change DR: Denied Request IC: Part A Late, Interim Status Compliance Letter Issued	RCRIS	OP002	Basic	Implementing organization
Process Determination	Date of inspection (field verification) of existence of hazardous waste management unit(s), or date of facility's document certifying the unit's status. Status Codes: AD: Agency (State or EPA) Determination FD: Facility Certified Document	RCRIS	OP003	Basic	Implementing organization
Part B Call-In	Date of letter from EPA region or authorized state requiring submission of permit application by a certain date.	RCRIS	OP010	Basic	Implementing organization
Pre-Compliance Certification Submitted	The date that the pre-compliance certification regarding compliance with boiler/industrial furnace (BIF) regulations is received by the state or EPA.	RCRIS	OP011	Basic	Implementing organization
Pre-Compliance Certification Review Completed	The date that the state or EPA completes the review of the BIF pre-compliance certification, and makes a determination as to whether it is acceptable or not.	RCRIS	OP012	Basic	Implementing organization
Notification of Compliance Testing	The date that the facility notifies EPA or the state of the date on which they will perform testing to demonstrate compliance with the BIF regulations.	RCRIS	OP013	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Case-By-Case Compliance Extension Requested	The date on which EPA or the state receives a request from the facility for an extension to the date by which they must be in compliance with the BIF regulations.	RCRIS	OP014	Basic	Implementing organization
Loss of Interim Status (LOIS)	The date on which the facility loses interim status. Status Codes: (Reason for Loss of Interim Status) 01: Failed to submit Part B and to certify compliance with groundwater monitoring and financial responsibility requirements 02: Failed to submit Part B and to certify compliance with financial responsibility requirements 03: Failed to submit Part B and to certify compliance with groundwater monitoring requirements 04: Failed to certify compliance with groundwater monitoring and financial responsibilities 05: Failed to submit Part B 06: Failed to certify compliance with groundwater monitoring requirements 07: Failed to certify compliance with financial responsibility requirements 08: Interim status lost, reason not yet determined, or other than above	RCRIS	OP015	Current	Implementing organization
Case-By-Case Extension Granted	Date on which EPA region or authorized state grants an extension for compliance with the BIF regulations. Status Codes: AR: Approved request DR: Denied request	RCRIS	OP016	Basic	Implementing organzization
Part B Received	Date EPA region or authorized state received the Part B application. Status Codes: CR: Confidentiality Requested CS: Confidentiality Substantiated CU: Confidentiality Unsubstantiated	RCRIS	OP020	Basic	Implementing organization
Notification of Automatic Extension	Date on which extension is automatically granted for compliance with BIF regulations.	RCRIS	OP021	Current	Implementing organization
Compliance Certification Submitted	The date on which the EPA or authorized state receives the certification from the facility that they are in compliance with the BIF requirements.	RCRIS	OP022	Current	Implementing organization
Compliance Certification Review Completed	The date on which the EPA or authorized state completes its review of the BIF compliance certification submitted by the facility and determines whether or not it is acceptable.	RCRIS	OP023	Current	Implementing organization

Name	Definition	Source	Code	History	Owner
Compliance Extension Expires	The date on which the BIF compliance extension granted by EPA or the authorized state expires.	RCRIS	OP024	Current	Implementing organization
Trial Burn Conducted	The date on which the trial burn (field test) of the combustion/incinerator unit is conducted.	RCRIS	OP080	Basic	Implementing organization
Public Notice	First day of 45 day Public Comment Period; date on which newspaper and radio announcements occur. Status Codes: DP: Draft Permit Issued ID: Intent to Deny	RCRIS	OP160	Basic	Implementing organization
Final Determination (GPRA) (Operating Permit)	Date EPA region or authorized state issues, or denies operating permit; corresponds to date on signed permit or letter to facility denying permit. Status Codes: PD: Permit denied. PG: RCRA permit issued with HSWA requirements, corrective action schedule not necessary. PI: RCRA permit issued, HSWA requirements do not apply to this facility. PJ: RCRA permit issued, with HSWA requirements, including a schedule for corrective action. PP: Permit issued by state, HSWA requirements apply but EPA permit covering HSWA has not been issued.	RCRIS	OP200	Basic	Implementing organization
POST-CLOSURE EVENTS					
GPRA hazardous waste controls / post-closure permits baseline universe	1997 GPRA hazardous waste facility baseline universe. This universe captures a specific set of facilities by ID number which were identified as being in the Post-Closure Permitting Workload universe (i.e., needing a post-closure permit) in the baseline year of 1997. This is a "snapshot" universe, frozen in time.	RCRIS	This universe of specific facilities is captured by a file of ID #s maintained by HQ.	Current	PSPD
Post-Closure Part B Call-In	Date of letter from EPA region or authorized state requiring submission of permit application by a certain date.	RCRIS	PC010	Basic	Implementing organization
Post-Closure Part B Received	Date EPA region or authorized state received the Part B application. Status Codes: CR: Confidentiality Requested CS: Confidentiality Substantiated CU: Confidentiality Unsubstantiated	RCRIS	PC020	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Public Notice	First day of 45 day Public Comment Period; date on which newspaper and radio announcements occur. Status Codes: DP: Draft Permit Issued ID: Intent to Deny	RCRIS	PC160	Basic	Implementing organization
Final Determination (GPRA) (Post Closure Permit)	Date EPA region or authorized state issues, or denies post closure permit; corresponds to date on signed permit or letter to facility denying permit. Status Codes: PD: Permit denied. PG: RCRA permit issued with HSWA requirements, corrective action schedule of compliance not necessary. PI: RCRA permit issued, HSWA requirements do not apply to this facility. PJ: RCRA permit issued, with HSWA requirements, including a schedule of compliance for corrective action. PP: Permit issued by state, HSWA requirements apply but EPA permit covering HSWA has not been issued.	RCRIS	PC200	Basic	Implementing organization
Plan Received - Closure/Post-Closure	Date closure/post-closure plan is received by region or state. Status Codes: CL: Closure PC: Post-Closure	RCRIS	PC310	Basic	Implementing organization
Plan Approved - Closure/Post-Closure	Date, following required public notice, that final approval is granted by region or state. Status Codes: ME: Final Closure MF: Final Post-Closure MO: Partial Closure MP: Partial Post-Closure	RCRIS	PC360	Basic	Implementing organization
Receive Closure Verification	Date owner/operator verification is received by region or state verifying that the approved closure plan was implemented as specified. Status Codes: NO: Not According to Plan PC: Post-Closure YE: According to Plan	RCRIS	PC370	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Closure Verification	Date region or state approves/accepts or rejects the closure certification and notifies the facility in writing. Status Codes: AC: Acceptable Closure UC: Unacceptable Closure	RCRIS	PC380	Basic	Implementing organization
COMPLIANCE/ENFORCEMENT EVENTS					
Verbal Informal Enforcement Action	The event by which the state or EPA issues a verbal informal enforcement action. Examples: date of site visit/conversation or telephone call.	RCRIS	CE110	Basic	Implementing organization
Written Informal Enforcement Action	The event by which the state or EPA issues a written informal enforcement action. Examples: Letter of Warning (LOW) or Notice of Violation (NOV).	RCRIS	CE120	Basic	Implementing organization
Combination-Informal Enforcement Action	The event by which the state or EPA issues a combination informal enforcement action. (Combination of CE110 and CE120.)	RCRIS	CE190	Basic	Implementing organization
Initial § 3008 (a) Compliance order	The event by which the state or EPA issues an initial § 3008(a), or equivalent state authority, enforcement action.	RCRIS	CE210	Basic	Implementing organization
Initial Imminent Hazard Order	The event by which the state or EPA issues an initial imminent hazard enforcement action under § 7003 or equivalent state authority.	RCRIS	CE220	Basic	Implementing organization
Initial Monitoring and Testing Order	The event by which the state or EPA issues an initial monitoring and analysis enforcement action under § 3013 or equivalent state authority.	RCRIS	CE230	Basic	Implementing organization
Initial § 3008 (h) Interim Status Corrective Action Orders	The event by which the state or EPA issues an initial § 3008(h), or equivalent state authority, enforcement action. *(NOTE: This event is also tracked in the corrective action instrument file in the corrective action module of RCRIS. It does not have to be entered in both places. Currently, if it is entered in the Corrective Action Module, that is sufficient. So while the event itself must be tracked at the national level, it is not mandatory that it be tracked in the CM&E Module of RCRIS.)*	RCRIS	CE240	Basic	Implementing organization
Notice of Non-Compliance	The event by which the state or EPA issues a notice of non-compliance to a Federal facility.	RCRIS	CE250	Basic	Implementing organization
Combination-Initial Formal Enforcement Action	The event by which the state or EPA issues a combination initial formal enforcement action. (Combination of CE210, CE220, CE230 and/or CE240.)	RCRIS	CE290	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Final § 3008 (a) Compliance Order	The event by which the state or EPA issues a final § 3008(a), or equivalent state authority, enforcement action.	RCRIS	CE310	Basic	Implementing organization
Final Imminent Hazard Order	The event by which the state or EPA issues a final imminent hazard enforcement action under § 7003 or equivalent state authority.	RCRIS	CE320	Basic	Implementing organization
Final Monitoring and Testing Order	The event by which the state or EPA issues a final monitoring and analysis test enforcement action under § 3013 or equivalent state authority.	RCRIS	CE330	Basic	Implementing organization
Final § 3008 (h) Interim Status Corrective Action Orders	The event by which the state or EPA issues a final § 3008(h), or equivalent state authority, enforcement action.	RCRIS	CE340	Basic	Implementing organization
Federal Facility Compliance Agreement	The event by which the state or EPA issues a final federal facility compliance agreement.	RCRIS	CE350	Basic	Implementing organization
CERCLA 106 Order	The event by which the state or EPA issues a RCRA CERCLA 106 enforcement action.	RCRIS	CE360	Basic	Implementing organization
CERCLA 104 Order	The event by which the state or EPA issues a RCRA CERCLA 104 enforcement action.	RCRIS	CE370	Basic	Implementing organization
Combination-Final Formal Enforcement Action	The event by which the state or EPA issues a combination final formal action. (Combination of CE310, CE320, CE330, CE340, CE360 and/or CE370.)	RCRIS	CE390	Basic	Implementing organization
Referral to AG	The event by which the state or EPA issues a referral to the Attorney General.	RCRIS	CE410	Basic	Implementing organization
Referral to DOJ	The event by which the state or EPA issues a referral to Department Of Justice.	RCRIS	CE420	Basic	Implementing organization
Referral to DA/CA	The event by which the state issues a referral to the District Attorney or County Attorney.	RCRIS	CE430	Basic	Implementing organization
Combination-Judicial Referral	The event by which the state or EPA issues a combination judicial referral. (Combination of CE410, CE420 and/or CE430.)	RCRIS	CE490	Basic	Implementing organization
Civil Action for Compliance	The event by which the state or EPA issues an initial judicial civil action for compliance.	RCRIS	CE510	Basic	Implementing organization
Civil Action for Imminent Hazards	The event by which the state or EPA issues an initial judicial civil action for imminent hazard.	RCRIS	CE520	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Civil Action for Compliance with Previously Issued Action	The event by which the state or EPA issues an initial judicial civil action for compliance of a previously issued action.	RCRIS	CE530	Basic	Implementing organization
Civil Action for Interim Corrective Action	The event by which the state or EPA issues an initial judicial civil action for interim corrective action.	RCRIS	CE540	Basic	Implementing organization
Civil Action for Monetary Penalties	The event by which the state or EPA issues an initial judicial civil action for monetary penalties.	RCRIS	CE550	Basic	Implementing organization
Combination-Civil Actions	The event by which the state or EPA issues a combination initial judicial civil action. (Combination of CE510, CE520, CE530, CE540 and/or CE550).	RCRIS	CE590	Basic	Implementing organization
Consent Decrees	The event by which the state or EPA issues a consent decree.	RCRIS	CE610	Basic	Implementing organization
Judicial Orders	The event by which the state or EPA issues a judicial decree.	RCRIS	CE620	Basic	Implementing organization
Criminal Actions	The event by which the state or EPA issues a criminal action.	RCRIS	CE710	Basic	Implementing organization
State to EPA	The event by which the state refers a case to the EPA.	RCRIS	CE810	Basic	Implementing organization
EPA to State	The event by which the EPA refers a case to the state.	RCRIS	CE820	Basic	Implementing organization
EPA RCRA to EPA CERCLA	The event by which the EPA refers a RCRA case to EPA CERCLA for action.	RCRIS	CE830	Basic	Implementing organization
Federal Facility Referral to EPA HQ	The event by which the state or EPA refers a Federal Facility case to EPA HQ.	RCRIS	CE850	Basic	Implementing organization
Combination-Admin. Referral	The event by which the state or EPA issue a combination administrative referral. (Combination of CE810, CE820, CE830 and/or CE850.)	RCRIS	CE890	Basic	Implementing organization
Date of Enforcement Action	The date the enforcement action was issued. For all formal actions involving written documents, the date should be the same as the date the document is signed. For an informal action, the date should reflect the date the handler received the actual notification.	RCRIS	CEE_ACT_DTE	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Date of Evaluation	The evaluation date is the *first* day of the inspection or record review regardless of the duration of the inspection.	RCRIS	CE_DATE	Basic	Implementing organization
Corrective Action Oversight (CAO) Inspection	An on-site inspection of corrective action activities. When corrective action on-site inspection is conducted as part of another inspection type (CEI, CME, etc.), a separate Handler Evaluation form should be submitted reporting the CAO component.	RCRIS	CMCAO	Basic	Implementing organization
Case Development Inspection (CDI)	A CDI may involve sampling to confirm the chemical composition/characteristics of wastes handled by generators and transporters, and their waste handling practices. In addition, facility operations and design information may be reviewed, and manifests from generators and transporters verified. A focused CDI may be conducted when a CEI reveals possible RCRA violations, and could serve to gather the additional data needed to support an enforcement case.	RCRIS	CMCDI	Basic	Implementing organization
Compliance Evaluation Inspection (CEI)	An on-site evaluation of the compliance status of the handler with regard to all applicable RCRA Regulations and Permits. Although portions of a CEI evaluation may routinely be conducted in an agency office setting, such "office" evaluations are considered as integral parts of the CEI in terms of the evaluation completion date. The major function of the CEI is overall review of the Handler's performance. The inspection includes an on-site examination of records and other documents maintained by the handler and an evaluation of the handler's compliance with all applicable requirements and sampling (if applicable). Where appropriate, it includes groundwater monitoring assessment outlines or plans, closure/post-closure plans, contingency plan reviews, waste analysis plan reviews, and preparedness and prevention plan reviews. Specifically excluded from the CEI type of evaluation are Financial Record Reviews. This review is most often conducted by "agency experts", and appropriately coded as Financial Record Review (FRR) type of evaluation. *(NOTE: OECA prescribes that all operating treatment, storage, and disposal facilities receive this type of inspection at least biannually.)*	RCRIS	CMCEI	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Comprehensive (GW) Monitoring Evaluation (CME)	A detailed evaluation of the adequacy of the design and operation of a facility's groundwater monitoring system as per EPA's Final RCRA Comprehensive Groundwater Monitoring Evaluation Guidance Document. Evaluation of the groundwater monitoring system design should be conducted by a hydro geologist and includes the review of the owner/operator's (o/o's) characterization of the hydro geology beneath hazardous waste management units, monitoring well placement and depth/spacing, and well design and construction. It is essential that the CME ensure that the o/o has designed an adequate groundwater monitoring system. In addition, an integral part of the CME is the review of the operation of the groundwater monitoring system through an evaluation of the o/o's sampling and analysis plan and its implementation. CMEs should be scheduled, to the maximum extent possible, to coincide with o/o sampling events to permit the field evaluation of sampling techniques. Inspectors should collect splits or conduct EPA/State sampling as a random check of groundwater quality data at any wells which may have indicated releases to support enforcement of corrective action. A comparison of EPA/State and o/o analytical results can be used to assess laboratory accuracy and establish the reliability of o/o submitted data. A CME should encompass everything covered in the CEI for groundwater monitoring facilities. In addition CMEs should include: a) a detailed investigation of the engineering features and effectiveness of the groundwater monitoring system; b) a detailed review of the facility's groundwater sampling and analysis plan; c) re-calculation of statistics at detection monitoring facilities to ensure that the facility should not be in assessment; d) detailed examination of the facility's assessment monitoring plan and field implementation; e) re-evaluation of groundwater flow direction; and f) a substantial amount of sampling.	RCRIS	CMCME	Basic	Implementing organization
Compliance Schedule Evaluation (CSE)	An on-site inspection or other re-evaluation conducted to verify compliance with enforcement actions resulting from a previous evaluation, or to review deficiencies noted in previous inspection. It may be a re-review of the adequacy of documents such as closure plans or financial instruments previously found to be absent or deficient for which no enforcement action has been taken. A Compliance Schedule Evaluation should only be used if the effort involved, or the extent of areas inspected, are insufficient to qualify as one of the more comprehensive evaluation types listed above.	RCRIS	CMCSE	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Financial Record Review (FRR)	An extensive detailed review of a handler's compliance with financial responsibility requirements. Financial Record Reviews are conducted in the Agency office and not on-site.	RCRIS	CMFRR	Basic	Implementing organization
RCRA CEI Performed with Screening Checklist	RCRA CEI inspection performed with screening checklist.	RCRIS	CMMMB	Basic	Implementing organization
Comprehensive & Coordinated Inspection with CEI	This value includes the performance of a RCRA CEI in a coordinated effort with other programs at a handler's site.	RCRIS	CMMMC	Basic	Implementing organization
Detailed Multimedia Inspection with CEI	This value includes the performance of a RCRA CEI by a specially trained inspector at a handler's site.	RCRIS	CMMMD	Basic	Implementing organization
Multimedia Screening Checklist Only	A CEI was not performed; however, the screening checklist was performed alone or as part of another type of inspection.	RCRIS	CMMMS	Basic	Implementing organization
Non-Financial Record Review (NRR)	An evaluation conducted in the Agency office involving a detailed review of non-financial records.	RCRIS	CMNRR	Basic	Implementing organization
Operation and Maintenance Inspection (OAM)	The Operation and Maintenance Inspection is a periodic inspection of how well a groundwater monitoring system continues to function once it is considered well designed. The inspection focuses on the condition of wells and sampling devices. Evaluation of well recovery notes, turbidity of water, total depth, depth to water, etc. should be made and compared to historic data. Sampling devices should be tested and if necessary pulled and visually inspected. The findings of an operation and maintenance inspection will indicate whether case development is warranted and/or will serve to focus future CMEs. The inspector should be experienced in evaluation of groundwater monitoring systems, e.g., hydro geologist. This inspection can include sampling. However, if a great deal of sampling is conducted, a separate sampling inspection should be recorded.	RCRIS	CMOAM	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Other Evaluation (OTH)	Any type of evaluation other than those listed above. *NOTE: OECA has proposed eliminating OTH and replacing it with 10 new evaluation types:* *1) Used Oil Inspection (UOI),* *2) Non-Subtitle C Inspection (SDI) - this would be for RCRA inspections at Non-Subtitle C facilities suspected of handling Subtitle C waste,* *3) Off-Site Inspection (OSI)* *4) Hazardous Spill Inspection (HSI)* *5) Tribal Land Inspection (TLI)* *6) Facility Status Inspection (FSI)* *7) Subpart CC Inspection (SCI)* *8) Subpart BB Inspection (SBI)* *9) Subpart AA Inspection (SAI)* *10) Small Business Policy Inspection (SBP)* *This proposal will be described in detail in the Quarterly Report distributed in March/April 1999 per the prevailing RCRIS Change Management Process.*	RCRIS	CMOTH	Basic	Implementing organization
Determined Not to Be a Significant Non-Complier (SNN)	A determination has been made to remove the SNC designation for a facility. This can be as a result of the facility returning to full physical compliance with regulatory and/or statutory requirements or with a compliance schedule. This evaluation is only applicable for former SNCs.	RCRIS	CMSNN	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Determined to Be a Significant Non-Complier (SNC)	A determination has been made to classify a facility as a SNC using the following guidelines as set forth in the March 15, 1996 Hazardous Waste Civil Enforcement Response Policy (ERP). A SNC is a facility which has caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; is a chronic or recalcitrant violator; or deviates substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements. The actual or substantial likelihood of exposure should be evaluated using facility specific environmental and exposure information whenever possible. This may include evaluating potential exposure pathways and the mobility and toxicity of the hazardous waste being managed. However, it should be noted that environmental impact alone is sufficient to cause a facility to be a SNC, particularly when the environmental media affected require special protection (e.g., wetlands or sources of underground drinking water). Facilities should be evaluated on a multi-media basis; however, a facility may be found to be a chronic or recalcitrant violator based solely on prior RCRA violations and behavior. *[NOTE: This evaluatoin should occur and be entered into RCRIS no more than ninety (90) days following the date of the evaluation/discovery of violation.]*	RCRIS	CMSNY	Basic	Implementing organization
Sampling Inspection (SPL)	This is an evaluation type in which samples (e.g., soil, sediment, surface water, groundwater, waste) are collected for laboratory analysis. Sampling inspections may be necessary for additional enforcement case development or may be performed as part of oversight of closure, post-closure, and/or corrective action activities being performed by the facility owner/operator.	RCRIS	CMSPL	Basic	Implementing organization
Compliance Assistance Activity (CAV)	The event by which any information or technical assistance is provided to the regulated community to help it meet the requirements of environmental law. This can be the date of an on-site visit conducted for this purpose, or it can be the date of a telephone conversation, or the date training is provided, or the date written outreach materials are mailed to the facility. *{NOTE: Refer to the OECA Operating Principles for further guidance on the definition of compliance assistance.]*	RCRIS	CMCAV	Current	Implementing organization
Facility Self Disclosure (FSD)	Assists in tracking and verifying that a Handler has self-disclosed the existence of a violation and/or performed an audit and has submitted the information as appropriate to the State or EPA.	RCRIS	CMFSD	Current	Implementing organization
Area of Violation	Indicates the specific area of the RCRA regulations that are in violation.	RCRIS	CEV_AREA	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Date Violation Determined	Date that a determination is made that the violation exists. This is not necessarily the same date as the date of the inspection or evaluation (for example, when the agency receives sample results or a legal determination).	RCRIS	CEV_DTEDET	Basic	Implementing organization
Actual Resolved Date	The date the agency determines that the handler demonstrated physical compliance (the date compliance was verified). The handler will be considered to be out-of-full-physical-compliance until the actual resolved date has been determined. Actual resolved date does not necessarily mean that all enforcement actions are completed for this violation. For violations of omission (such as not manifesting a load of waste) the actual resolved date is the date of a written commitment by the handler to comply in the future or the day of conviction in a criminal action. Penalty payment is not a condition of physical compliance; however if non-payment is the only violation then the actual resolved date is the date that payment is received.	RCRIS	CEV_ACT_DTE	Basic	Implementing organization
Scheduled Response Date	Date by which the handler is to submit to the agency its documentation that the violation has been brought into compliance. Scheduled response dates are specified in enforcement actions as the compliance schedule. If a number of activities are to be performed according to a compliance schedule with more than one date, enter the date of the last action to be taken by the handler to return to compliance. If Class of Violation is "P", Scheduled Response Date is the date a decision is expected on the final status of the pending violation (i.e.: the date on which it will be known whether or not the pending violation is, or is not, a violation).	RCRIS	CEV_SCH_DTE	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
SEP/Enforcement Milestone Code	**ECA** Environmental Compliance Audits. These audits are an independent evaluation of a defendant/respondent's compliance status with environmental requirements. **ECP** Environmental Compliance Promotion. A project that involves the dissemination of information, or the providing of training or technical support, to a regulated party or to some or all members of the defendant/respondent's economic sector to: 1) achieve and maintain compliance with regulatory requirements; 2) determine what are its regulatory requirements and thereby avoid committing a violation; or 3) go beyond compliance by reducing the generation, release, or disposal of pollutants beyond legal requirements. **EMA** Environmental Management Systems Audits. These audits are an independent evaluation of a party's environmental policies, practices, and controls. **EPP** Emergency Planning and Preparedness. An emergency planning and preparedness project is one where a defendant/respondent provides assistance, such as computers and software, telephone/radio communications systems, chemical emission detection and inactivation equipment, HAZMAT equipment, or training for first responders to chemical emergencies, to a responsible state or local planning entity. **ERE** Environmental Restoration. A project that goes beyond repairing the damage caused by the violations to enhance the condition of the environment adversely affected. **PHE** Public Health. A project that provides diagnostic, preventive, and/or remedial components of human health care that is related to the actual or potential damage to human health caused by the violation. **PPA** Pollution Prevention Assessments are systematic, internal reviews of specific processes and operations designed to identify and provide information about opportunities to reduce the use, production, and generation of toxic and hazardous materials and other wastes.	RCRIS	CEE_S_MI_CDE	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
SEP/Enforcement Milestone Code (continued)	**PPE** Pollution Prevention. A project that reduces the generation of pollution through 'source reduction', i.e., any practice that reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise being released into the environment prior to recycling, treatment, or disposal. If the pollutant or waste stream has been generated, pollution prevention is no longer possible and the waste must be handled by appropriate recycling, treatment, or disposal methods. Pollution prevention can be accomplished by: 1) Equipment/technology modifications; 2) Process or procedure modifications; 3) Product reformulation/redesign; 4) Raw materials substitution; 5) Improved housekeeping/O&M/training/ inventory control; 6) In-process recycling; 7) Energy efficiency/ conservation; 8) Other. **PRE** Pollution Reduction. A project that results in a decrease in the amount or toxicity of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise being released into the environment by a means that does not qualify as 'pollution prevention'. **SAA** Site Assessments. These assessments are investigations of the condition of the environment at a site, or of the environment impacted by a site, and/or investigations of threats to human health or the environment relating to a site.				

Name	Definition	Source	Code	History	Owner
Type of Penalty Amount Indicator	Code which indicates the type of penalty associated with the penalty amount. For 100 Series Enforcement Action Types: No penalties should be associated with this type of enforcement action series. For 200 Series Enforcement Action Types: **PA** **Proposed Monetary Penalty.** The amount of the total penalty in dollars proposed in an initial enforcement action. **FA** **Final Monetary Penalty.** The amount of the total penalty in dollars a handler named in an enforcement action must pay directly to the responsible agency. For 300 Series Action Types: **FA** **Final Monetary Penalty.** The amount of the total penalty in dollars a handler named in an enforcement action must pay directly to the responsible agency (for consent agreements with SEP, this is exclusive of SEP credits). **FC** **Final SEP Cost.** The final amount cited in an enforcement action as the cost in dollars to the handler of a supplement environmental project. **CR** **Final SEP Credit.** The credit in dollars allowed by the agency for the completed SEP and applied towards the total final settlement amount. For 400 Series Enforcement Action Types: **PA** **Proposed Monetary Penalty.** The amount of the total penalty in dollars credits, proposed in an initial enforcement action. For 500 and 700 Enforcement Action Types: **FA** **Final Monetary Penalty.** The amount of the total penalty in dollars a handler named in an enforcement action must pay directly to the responsible agency.	RCRIS	CEE_PEN_TYPE	Basic	Implementing organization

Name	Definition	Source	Code	History	Owner
Type of Penalty Amount Indicator (continued)	For 600 Enforcement Action Types: **FA** **Final Monetary Penalty.** The amount of the total penalty in dollars a handler named in an enforcement action must pay directly to the responsible agency. **FC** **Final SEP Cost.** The final amount cited in an enforcement action as the cost in dollars to the handler of a supplement environmental project. **CR** **Final SEP Credit.** The credit in dollars allowed by the agency for the completed SEP and applied towards the total final settlement amount. For 800 Enforcement Action Types: No penalties should be associated with this type of enforcement action.				
Penalty Amount	The dollar amount associated with the Type of Penalty Indicator field.	RCRIS	CEE_PEN_AMT	Basic	Implementing organization
Multimedia Code	Code which indicates the medium or program other than RCRA participating in the enforcement action.	RCRIS	CEE_MM_CODE	Basic	Implementing organization
BRS DATA					
Waste Quantity Unit of Measure	Unit of measure used to report quantity of the waste stream received by a site (Form WR) or generated by a site (Form GM).	BRS	WST_QTY_UOM	Basic	Implementing organization
Quantity Generated Current Year	The total quantity of the waste that was generated during the reporting year.	BRS	GEN_QTY	Basic	Implementing organization
Generator Status	Code indicating the current generator status during the current reporting year (i.e., LQG, SQG, CESQG, non-generator).	BRS	GEN_STS	Basic	Implementing organization

PART A-2: RECOMMENDED DATA ELEMENTS THAT ARE NOT CURRENTLY MANDATORY CORE/NATIONAL DATA

(These data elements are under development; precise definitions are not yet available.)

Name	Definition	Source	Code	History	Owner
RCRIS DATA					
GPRA enforcement and compliance assurance facility baseline	All hazardous waste facilities that are actively managing waste.	RCRIS	New - will be added	Basic	OECA
GPRA enforcement and compliance assurance high priority areas baseline	All hazardous waste facilities that exist in high risk areas or where populations are disproportionately exposed (Environmental Justice).	RCRIS	New - will be added	Basic	OECA
GPRA enforcement and compliance assurance small business baseline	All hazardous waste facilities that are considered small business entities that receive relief under the small business policy.	RCRIS	New - will be added	Basic	OECA
GPRA enforcement and compliance assurance use of incentive policies	The use of enforcement and compliance assurance incentive policies by the regulated communities and federal facilities.	RCRIS	New - will be added	Basic	OECA
GPRA enforcement and compliance assurance use of PPAs	PPAs that include joint planning and priority setting for Enforcement and Compliance Assurance.	RCRIS	New - will be added	Basic	OECA
BRS DATA					
On-Site Handling	Code indicating if the waste described was treated, disposed, or recycled on site or discharged to a sewer/POTW.	BRS	ON_SITE_MANG	Basic	Implementing organization
Off-Site Handling	Code indicating whether waste described in Section I was shipped off site during the current year.	BRS	OFF_SITE_SHP	Basic	Implementing organization
Reduce PBT chemicals in hazardous waste streams; baseline	Percent reduction of the most persistent, bioaccumulative and toxic chemicals in hazardous waste streams. 1991 GPRA baseline quantities.	TRI/BRS	N/A	Basic	HWMMD

Name	Definition	Source	Code	History	Owner
Increase amount of hazardous waste safely recycled; baseline	Tonnage and percent increase in the amount of hazardous waste safely recycled based on the amount safely recycled in 1993. Percent of hazardous waste safely recycled in 1993.	BRS	N/A	Basic	HWID
OTHER					
Reduce combustion emissions; baseline	Receipt of certification; certification is received on date receiving organization logs it in. 1994 hazardous waste combustor emissions of dioxons/furans, particulate matter, and acid gases.	HQ Combustion Database	N/A	Basic	To be determined

APPENDIX B.

LIST OF ACRONYMS

AA	Assistant Administrator
AG	Attorney General
APP	Annual Performance Plan
ASTSWMO	Association of State and Territorial Solid Waste Management Officials
BRS	Biennial Reporting System
BYP	Beginning of Year Plan
CA	County Attorney
CAO	Corrective Action Oversight
CC	Coordinating Committee
CDI	Case Development Inspection
CEI	Compliance Evaluation Inspection
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIRMD	Communications, Information, and Resource Management Division
CESQG	Conditionally Exempt Small Quantity Generator
CM	Corrective Measure
CME	Comprehensive (Groundwater) Monitoring Evaluation
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study
CSE	Compliance Schedule Evaluation
DA	District Attorney
DOJ	Department of Justice
ECOS	Environmental Council of States
EPA	Environmental Protection Agency
ERP	Enforcement Response Policy
ESC	Executive Steering Committee
FRR	Financial Record Review
GAO	Government Accounting Office
GPRA	Government Performance and Results Act
(Form) GM	Generation and Management
GW	Groundwater
HMA	Handler Monitoring and Assistance
HSWA	Hazardous and Solid Waste Amendments
HWID	Hazardous Waste Identification Division
HWIR	Hazardous Waste Identification Rule
HWMMD	Hazardous Waste Minimization and Management Division
IEM	Information Engineering Methodology

LIST OF ACRONYMS (continued)

IMB	Information Management Branch
IS CA Orders	Interim Status Corrective Action Orders
ISP	Information Strategy Plan
LQG	Large Quantity Generator
MCL	Maximum Contaminant Level
MISWD	Municipal, Industrial, and Special Waste Division
MOA	Memorandum of Agreement
MSWLF	Municipal Solid Waste Landfills
NCAPS	National Corrective Action Priority System
NEPPS	National Environmental Performance Partnership System
NRR	Non-Financial Record Review
OAM	Operation and Maintenance Inspection
OCFO	Office of Chief Financial Officer
OECA	Office of Enforcement and Compliance Assurance
OMOA	Overarching Memorandum of Agreement
OSW	Office of Solid Waste
OSWER	Office of Solid Waste and Emergency Response
P2000	Partnership 2000 Pilot System
PAA	Program Area Analysis
PARS	Program Accomplishments Report System
PBT	Persistent, Bioaccumulative, and Toxic
PC	Personal Computer
PCA	Permitting and Corrective Action
PE PAA	Program Evaluation Program Area Analysis
PIT	Permits Improvement Team
POTW	Publicly Owned Treatment Works
PPA	Performance Partnership Agreement
PPG	Performance Partnership Grant
PSPD	Permits and State Programs Division
RA	Regional Administrator
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RECAP	Reporting for Enforcement and Compliance Assurance Priorities
REI	Reinventing Environmental Information
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RIP	RCRA Implementation Plan

LIST OF ACRONYMS (continued)

SIC	Standard Industrial Classification
SNC	Significant Non Complier
SPL	Sampling Inspection
SQG	Small Quantity Generator
TRI	Toxics Release Inventory
TSD	Treatment, Storage, or Disposal
UID	Universe Identification
WAM	Waste Activity Monitoring
WIN/INFORMED	Waste Information Needs/Information Needs for Making Environmental Decisions
(Form) WR	Waste Received

APPENDIX C.

ESC POSITION ON PE RECOMMENDATIONS

The WIN/INFORMED Executive Steering Committee (ESC) is responsible for making the final determination on recommendations contained in this report. ESC members include senior managers from states and EPA who represent their individual organizations. The ESC reviewed the PE final report and collectively supports all recommendations with some comment. The states, EPA regions and EPA headquarters' Offices of Solid Waste (OSW) and Enforcement and Compliance Assurance (OECA) ESC members have the following comments for the record.

State Position

The states agree with Recommendation 1 for a base set of national data elements for plans, grants, and evaluations but would like clarification that states currently are not required to report numerical data for certain GPRA measures, and that this report does not change state GPRA or core measures reporting requirements. There is general support for Recommendations 2, 3 and 4 dealing with automated systems, noting: (1) a system to track the hazardous waste management program outlined in recommendation 2 is a good idea conceptually, (2) there is uncertainty about the level of increased efficiencies that may be gained from the P2K system mentioned in recommendation 3, and (3) recognizing issues with the existing information systems found in recommendation 4. The States strongly agree with recommendations 5 and 6 (ranking of national priorities and timely issuance of guidance documents, respectively). While there is support for Recommendation 7 dealing with streamlining current hazardous waste planning processes, the states found it difficult to assess.

Regional Position

The Regions support all recommendations with comment on Recommendation 2 questioning whether development of a national automated system to track hazardous waste program progress is the best use of resources given other individual organizations' potential effort to develop such a system.

Headquarters OECA Position

OECA supports all recommendations with comment on Recommendations 5 and 7. For Recommendation 5, OECA notes that any emerging system(s) should accommodate multiple priorities since it may be difficult to rank priorities between OSW and OECA due to differing program practices. Recommendation 7 recommends that plans not in use should be eliminated, OECA notes all their plans are used.

OSW Position

OSW supports all recommendations without comment.

NOTES